

THE  
**EARTH - NOT A GLOBE - REVIEW.**

---

*"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.*

---

No. 1.

JANUARY, 1893.

PRICE 2D.

---

**GREETING !**

IT may be thought that there are a sufficient number of Periodicals in the market without adding one more to the extensive list. There are plenty no doubt, if they were all of the right kind. But are they? How many of them profess to stand by the Word of God as true and faithful in all its parts. And of those who profess to uphold the sacred Scriptures as inspired of God, how many believe and advocate the literal truth of the account of Creation as recorded therein? or the various descriptions given by them of the works of God as found in what is called Nature? Not one! At least, we know not of any.

Not a single Christian Editor who in the face of the so-called "Science" of the nineteenth century dare contend for the literal truth of the Bible text given at the heading of this paper? We repeat it, we know of none. We know of many, and some loud in their profession that they believe the Bible to be the inspired Word of God, who yet have declined to allow us, or our friends, to uphold in their columns the literal truth of the Bible in all its references to the material Creation. We deplore this fact; and hence the necessity has been laid upon us, with all our weakness, physically or numerically, to come to the rescue in *The Earth Review*. God is able to use the weakest instrumentality to his own glory, and to the confusion of the enemies of his truth. Our trust is in God; and in the faithfulness of his Word, in *all* its teachings from Genesis to Revelation. Our motto is, Let God be true, though every man be a liar.

If Genesis is not to be relied upon, in its description of Creation, how shall we trust Exodus? If the Old Testament is not true, what will become of the New? If the Creator, through his servants, the prophets,

has not correctly described his Works, how can we trust him for our salvation? As the great Teacher, who came from God, himself declared; "If ye believe not his (Moses) writings, how shall ye believe my words? They stand or fall together. Our Lord says so; and every logical and candid mind must see it is so. We are prepared to accept the conclusion; for we feel sure that no fact in nature is contrary to Bible teaching.

It is well-known that the teachings of modern Astronomy are opposed to the teachings of the Bible; but it is not so well understood that all known facts in nature are in harmony with Bible representations. Thomas Paine, in his so-called "*Age of Reason*," says:—

"The two beliefs"—Modern Astronomy and the Bible—"cannot be held together in the same mind: he who thinks he believes both has thought very little of either."

This witness is true here. But he makes the very common mistake of assuming, or supposing, that Astronomy must be true; and hence he draws the unwarrantable conclusion that the Bible must be false. This is not "reason," but assumption; and is surely an unpardonable offence against good logic on the part of one who professes to "reason." We call the attention of our sceptical friends to its inconclusiveness. Give us *facts*, or sound "reasons" based on facts, and we will listen to our opponents with attention; but it will be the province of *The Earth Review* to expose from time to time the flimsy pretexts for reason which so frequently are placed before us by those who oppose the Word of the living God on questions of Cosmology.

We want the *facts* of Science, not in its every varying theories and contradictions. For these facts we shall ever be glad to find room, in proportion to their importance and our space. But, we candidly confess at the outset that we do not know of any one fact in Nature which conflicts with the accounts of the Creation or Universe, as set forth in the Holy Scriptures. The God of Creation or of Nature, is the God of Revelation; and both these we believe to be in harmony. These harmonies we propose to shew to our readers as we have opportunity in future numbers of our little paper.

We invite our friends, all over the outstretched earth, to come forward and help us. They can strengthen our hands with means and with matter. Short, pointed, and pithy articles, or letters—written on one side of the paper only—and sent to the Editor, will receive careful attention. Also *marked* and prepaid newspaper articles, or cuttings connected with the subject. Subscriptions for the paper must be sent to the Secretary, Mr. John Williams, 32, Bankside, Southwark, London, S.E.

As we are entirely undenominational, we are not going to attempt to establish another sectarian church, or to support any particular existing one. "The Universal Zetetic Society" is simply banded together to contend for the Truth and honour of God's Word, especially as related to His Works in Nature and Creation; and *The Earth Review* is its organ. We therefore invite the co-operation of all earnest-minded men, by whatever distinctive names they may, unfortunately, happen to be called. We are certain that all who are concerned for the honour of God's Word, and all who desire to see Nature honestly interpreted, must acknowledge that our aim and purpose is good. To all such, we send greeting. "If the foundations be destroyed, what can the righteous do?" But again, "If God be for us, who," with any hope of success, "can be against us"?

### UNIVERSITY EXTENSION.

According to a report in the *Standard* of Tuesday, November 29th, 1892, the Chelsea centre of the University Extension Society held its annual meeting the previous night at St. Mark's College, Chelsea.

The chairman, Mr. H. D. Ackland, M.P., Vice-President of the Council, spoke of the advantages to be obtained in connection with our Universities, in providing students and teachers from elementary schools, with advanced scientific instruction. He asked the London County Council for a grant of £10,000 to £20,000, "for the purposes of a Teaching University in promoting the work of University Extension teaching." He also hoped that the Government would "meet that sum with something like a grant of a similar amount." London had "already devoted £30,000 a year to the purpose of forwarding education."

These are modest sums of money; but we would not complain if they were indeed devoted to the purposes of "education." Students should be allowed, and trained, to think for themselves, and not crammed, like school children, with mere theories already in vogue. To educate (*L. e.* and *duco*) means to *educere*, or to draw forth the thinking powers of the mind, not merely to cram it with dates, historical facts, or so-called scientific hypotheses. To teach men, indeed, *how to think*; not simply to fill their minds with the ideas or thoughts of other men.

Does the University Extension Society aim at this? Do our Universities? For instance, if any student should get up and call in question the teachings of modern Astronomy, giving his reasons for so doing, would he be encouraged as an original thinker? Would he be tolerated even, however strong the reasons he might be prepared to offer? We think not, and if he would not, what becomes of the boast of education? What powers of mind are *educated* by stifling all scientific discussion? What was the state of theology when the Church of Rome had power to silence—

not by argument, but by fire and faggot—all controversy? And such at present is the state of scientific teaching in our Schools and Universities. It is one sided, cramped, and in some cases, even superstitious, out of harmony with Nature.

If we are wrong in so speaking, let anyone of our University friends step down for a moment from his high pedestal of learning, and let him give us one proof in support of the popular view that we are living on a whirling globe flying through something called "space" at the fearful rate of about eleven hundred miles in an hour, or nineteen miles a second! Or to simplify matters, we will waive the question of the shape of the earth, if any of our *savants*, with all his boasted University education, can give us one decent proof that the earth has any motion at all. We only ask for one, if it be a good one. Who will give it? Our "space" shall be at his disposal; at least a fair share of it. Now, "Scientists" to the rescue; and if you can give us only one proof of the Earth's supposed motion, we will yield your right, and advocate your claim, to the modest sum of £30,000 to £40,000 which you are asking in support of your University Extension Scheme. But if you cannot give us the proof asked for in support of one of your favourite "Sciences," and one, too, which is positively asserted to be an "exact" Science, then you must excuse us saying that we think you are unworthy of the support demanded; and that, moreover, your boasted system of education is unsound, unscientific, and misleading, and must sooner or later give way to the true Zetetic mode of teaching advocated by us.

### SCIENCE AND COURTSHIP.

At the meeting of the University Extension Scheme, before referred to, one of the speakers (S.A.B), "spoke of a workman who was devoted to literature, another who was absorbed by scientific study," and of "a young man who was courting," and who complained that when "he walked out with his young woman he could not talk history with her, or Science, or Literature; so that but for the matter of an occasional kiss, his courtship was very monotonous." This, it is reported, made the audience laugh, but whether at the awkwardness of the promising young scientist, or at the novel way of recommending "science" to the sex, the report does not proceed to inform us.

But our fair readers will not be slow to perceive the moral of this. Let them attend well to University Extension Lectures, or let them be prepared to forego the honour, if not the pleasure, of being wooed by any young aspirant after scientific honours. Just think of it. "Only an occasional kiss"! And no "scientific" jargon, or learned technicalities, to fill up the "monotonous" intervals! Oh Venus! What a fearful

prospect! Ye virgins take heed. We are living in the nineteenth century; and vain shall be all your fair blandishments, and youthful charms, unless you are prepared to satisfy Mercury that you are fully competent to conduct your courtship according to the rules of scientific terminology. How in the world did our forefathers manage in past ages? Poor, simple and misguided souls!

Fancy the dreariness of their courtships, for over five thousand years—at least!—and with only "an occasional kiss" to relieve the monotony of their unscientific existence! How thankful we, their sons, ought to be that we were not born in their days, nor in the olden times before them! But ye maidens, take courage; and instead of wasting your time at your toilets, attend henceforth to your studies. Instead of learning such common place acquirements as how to stitch, cook, and darn, to make shirts or to knit stockings, you must now go in for "science," study "literature," and how to "talk history." Then when you have "passed" your examinations in these higher studies, certificates may be awarded you, by our grave and "reverend" seigniors, certifying our younger scientists that are now in a fit and proper condition of mind to be wooed and won by them. Certifying you can "talk history, science, or literature," in such a sort as to relieve the tedium of cool scientific courtship, even though there be only a "very occasional kiss" thrown in for the sake of a little unscientific variety.

### CREATION *versus* SALVATION.

OR

### ILLOGICAL CHRISTIANS.

We are often advised by well-meaning Christians, who are ignorant of the bearings of our contention, to allow the subject of the plane earth to "drop," and to join with them in proclaiming what they are pleased to call "the gospel." As we are going to press we have received another gratuitous piece of advice of the same nature. Our friend writes:—

"You believe the earth is flat and stands still. I may give it a passing notice. I am surprised to find a man of so much intelligence and learning should persist in such notions. Is it not a clear fact that we can determine the approximate size of the globe? And if you go in a straight line in any direction you will come to the place from which you started, and how do you account for the Seasons, and the difference in the length of the days at different Seasons; and tidal motions, &c. I think you would be better engaged in helping to swell the world-wide cry of the Gospel. Don't you think so?"

In answer to the last question we say decidedly, No! not at the expense of leaving off teaching the *plain truth*. It is undeniable that the Holy Scriptures teach that the Earth is stationary; that it rests on "foundations" and "pillars"; and that it is "established so fast that it cannot be moved." We therefore contend that if, as some of our christian friends would have us believe, the Bible is not true in its material teachings respecting the Universe, it is not reliable in its promises of spiritual blessings. But we maintain that the Bible *is* true; true to fact and to every day observation; and that the earth does not move. In future numbers we hope to give good proofs of the earth's immobility for those who need them; but in the meantime we have a right to ask for some *one* proof, and we only ask for one, of the earth's supposed terrible motions? It *appears* stationary. It *feels* stationary. Then why should we give up the evidence of our God-given senses for the sake of a mere astronomical and unsupported assumption?

There is much more behind this question of the shape of the earth than our good natured but illogical advisers are aware of. If we are credited, as we are by those who know us, with at least an average share of common sense, and a little more than the average amount of "intelligence and learning," how is it that our advisers—who for the most part have never really *studied* the question—how is it they cannot credit us with understanding *this* subject, which *we* have studied, and with understanding its importance as supplying a good foundation for our confidence in the sure Word of God? We maintain that if the Bible is not true respecting the material Creation, it is not reliable in its promises of Salvation; and that it is perfectly useless to preach the Gospel of Jesus the Christ to men who have lost their faith in the inspiration, or truthfulness, of the Word of God. It is, moreover, a great pity when Christian friends unite with sceptical foes in support of a godless science, falsely called "science," which strikes at the very foundation of the truth of the Creator's Word. They incur a grave responsibility in so doing. Let them take heed.

In answer to our correspondents questions, we say. It is *not* "a clear fact that we can determine the approximate size of the globe." It is *not* a clear fact that the earth is a globe at all. Let proof be offered. And again, it is not possible "to go in a straight line in any direction, and come back to the place of starting." Any "straight line" is an impossibility on a spherical surface. But apart from this self-evident fact, no one has ever travelled or voyaged due North, or due South, and come back to the same place again. The great ice barriers would prevent this. Yet our correspondent thoughtlessly says, "in *any* direction"! Men can go round the World in an easterly or a westerly direction; but this is also possible on a plane. Hence it is no proof of the earth's sphericity. But

our opponents do not seem to be able to discriminate in these things. It is the fault, doubtless, of our system of "education," which crams young minds with other men's ideas, instead of teaching them to think for themselves, and to think cautiously and accurately.

Let us hope that *The Earth Review* will help, at least, to raise enquiry, and so teach men to think for themselves; and not to leave all their thinking to professional and interested preachers of science. There is an evident need of such a paper as ours, even apart from its advocacy of the truth of the Bible, if only to awaken candid enquiry. Let us hope that all lovers of truth—natural truth or spiritual—and all lovers of original ideas, possessing true freedom of thought, will rally round us, and help us on towards a world-wide circulation of *The Earth Review*.

## SABBATH MUSINGS.

### "THE GLORY OF GOD."

The inspired Psalmist says that "The heavens declare of glory of God; and the firmament sheweth his handywork"; therefore, whatever some professed Christians affirm to the contrary, the subject of Creation is connected with right views of God, his worship, and his glory. But if we would have a right conception of God, and his glory, we must see to it that we have a right conception of his works in Creation. How, for instance, do we obtain an insight into the character of any great man, whether he be a poet, politician, sculptor, general, or king? It is not by his acts, or his works? But suppose these acts, or works, are misrepresented to us, or defaced by someone, should we not have false and distorted views respecting the author, artist, or the maker of those things? Assuredly. And so it comes to pass in respect to the construction of the world, false views of the universe have led men into a misconception respecting the Character of God, and even alas! in many cases, to a denial of the very existence of such a personal Being.

Let us, then, endeavour to come back to first principles. The world exists, and must have come from somewhere. It is "unthinkable" to say it came by chance, or any "fortuitous concourse of atoms." Its wonderful variety, the general co-relation and adaptibility of its various parts, and the exact and never failing motions of all the heavenly bodies, *prove*, to any well-balanced and unprejudiced mind, that some grand and controlling Intelligence directs and rules over all. As the apostle Paul declares, "The invisible things of Him from the creation to the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead: so that they are without excuse." Rom. i. 20.

A grand truth lies in this statement of the apostle. Paul was no fool. It is allowed on all sides, alike by friend and foe, Sceptic and



Christian, M. Renan and the Archbishop of Canterbury, that no one man has had more influence in forming Christianity, the history of which has for eighteen centuries been making the history of the civilised world, than the apostle Paul. His name will be had in honour when the names of the adversaries of the truth will have sunk into merited and everlasting oblivion. And this great man agrees with the Psalmist in teaching that the Creation, as set forth in the Bible, and as found in what some call "Nature," sets forth unmistakably the grand truth that God is. Now, this is a fundamental verity, and the foundation of all true faith. GOD IS. And "he that cometh to God must believe that He is, and that He is a rewarder of them that diligently seek Him." Now, this faith is, on the one hand, neither an unreasoning credulity, nor, on the other hand, is it a bigoted *dis*belief. It is based on an intelligent and reasonable understanding of the things that are seen above and around us.

The Book of Nature is open to all men; but it must be read and studied without prejudice and without philosophical bias. We must come to it like little children, with the honest desire to know the truth, and not attempt to read into it our own, nor any one else's, plausible or implausible hypotheses. If we do this patiently and persistently, we shall be "rewarded": the grand and inefaceable truth will dawn upon us that GOD IS.

We shall see His glory in the bright and blazing sun as he goes forth majestically, like a giant, to run his daily course. We shall own *His* Power and Godhead when the moon, queen of the night, rises in quiet and stately splendour, to reflect her silver radiance in every rippling stream. And we shall confess *His* wisdom and unfailing skill when, at night, we gaze up into the firmament and behold ten thousand glittering gems, shining in matchless beauty, and shedding upon the earth their silent influences, as they nightly perform their appointed revolutions. Truly we shall then confess with the Psalmist, that "the heavens declare the glory of God, and the firmament sheweth His handiwork."

"The firmament sheweth His handiwork." That vast and incomparable structure which spans the heavens, and covers the earth with its capacious dome, divides the waters which are "above" the firmament from the waters which are "under" the firmament. And when we realize something of the tremendous size of this tent-like covering, spanning with one mighty arch across the whole of the outstretched earth; when we considered its weight, its strength, its stability, and the avowed purpose for which it was made by the Creator, we can unhesitatingly and devoutly again exclaim with the Psalmist, "The firmament sheweth His handiwork." No wonder such a "work" occupied the whole of one day, the third, in the "great and marvellous" work of the six days Creation. Job, one of the finest, and certainly one of the most ancient, of true philosophers,

when comparing the works of God with the puny works of man, asks: "Hast thou with Him spread out the sky, which is strong, and as a molten looking glass?" Job 37: 18. It is, perhaps, this mirror-like quality which the firmament possesses that makes unbelieving "scientists" think that they can, with their glasses, peer into what they call "space," which they affirm to be "boundless." As well might a child, gazing upon the bosom of a glassy lake, affirm that it had no bottom, and that the sky and clouds, reflected from its placid surface, were slumbering in the unfathomed depths below, and not above, its waters.

The idea of illimitable "space," filled with an infinity of revolving worlds or globes, is not only a bewildering idea, unfounded on fact, but it directly tends to remove the Creator, or rather the idea of a Creator, far, and farther, away from this earthly plane of ours. It necessarily and logically leads to Atheism; and too often, alas! it practically leads men there. The idea of Heaven as a place, the abode of The Eternal, becomes to the logical and thinking Newtonian a *myth*; and God, if he acknowledge such a personal Being at all, becomes farther and farther removed from the scene of all earthly operations. Whereas the Saviour of the World, who "came down from Heaven," to do his Father's will, taught His disciples to believe that Heaven was not very far off; that it was directly and always "above" us; that God was concerned in the work of His hands; and that as "our Father," He was near enough to hear the prayers of all those who call upon him in sincerity and truth. This is assuring: this is comforting. God cares for the world; and He will punish those who afflict mankind with their selfishness, their greed, their falsehoods, and their oppressions. Yea, God has "so loved the world"—not the "globe," as some misguided Christians have lately printed and perverted this sublime text with a ridiculous "globe" stamped on the paper—God "so loved the world that He gave His only begotten Son, that whosoever believeth in Him should not perish but have everlasting life." This, we say, is comforting. It is assuring. But, on the astronomical hypothesis, the world is like an uncared-for orphan, or a desolate wanderer: God is removed too far from us to be any practical use; and the idea of Heaven is so vague, that such a place, if it exist at all, may be anywhere or nowhere; "all round the globe;" or spirited away from us altogether, "beyond the bounds of time and space." Thus the Christian's hope is undermined, and his faith is eaten away at the very core by this insidious and so-called "scientific" worm. This is most calamitous; yet even some of our "spiritual guides" are either so false to their professions, or are so deceived themselves, that they cry out, "It does not matter what shape the earth is; we don't care whether it be round or flat, square or oblong, so long as"—yes, so long as they get a good "living," and hold a respectable position in society? Is this it? Such a confession really means, when put into plain language, We do not care

whether the Bible be true or false, in its record of Creation, so long as our interests or our hope of "Salvation" is assured. But "woe" is pronounced against such easy going shepherds of Israel. "Woe" to them who are leaving their flocks to become a prey to the devouring wolves of "Science," "falsely so called," as the great apostle intimates. Let us be on our guard. There are honourable exceptions to such false shepherds and teachers, and others are being raised up to warn us. We have quoted some of their noble testimonies. Let us give heed to these needful warnings. God has never left Himself without witnesses to His Truth whether in Nature or in Revelation. We may shew this, if the Lord permit, more fully another time as regards Creation truth.

In conclusion, we would call the attention of all our readers to the seasonable warning given us by the Apostle Paul, where he says;—"Beware lest any man spoil you through *philosophy* and vain deceit, after the tradition of men, after the rudiments of the world, and *not after CHRIST.*" Col. 2:8. And again, Let us "prove all things; and hold fast that which is good."

"Historically as well as logically the concession of any scientific errors has led to the downfall of the whole Biblical system of doctrine. Moses in his vision of the creation during six days may not have reviewed the whole physical development of the globe."

*The Century Illustrated Monthly Magazine.*

Of course the "concession" of error in the Bible must eventually and logically, lead to the downfall of "the whole Biblical system of doctrine" *in the minds of those making the concession*: but we do not make that concession, and we call for proof that the Earth *is* a "globe" before we can make it. But the above extract shews the importance of our contention that the Earth is a plane.

ED. T.E.R.

"If the origin from which a system of philosophy is derived be a false and erroneous one, whatever emanates from it must of necessity be also false."

LORD BACON.

"We should have fewer disputes in the world if words were taken for what they mean."

LOCKE.

Mr. J. Lack read a paper on "Zetetic Astronomy" at the Breakley Road Chapel, London, December 20th, 1892. But the report reached us too late for further notice.

## THE SONG OF THE EVOLUTIONIST.

By "ZETETES."

In the infinite ages of past time  
 There was nothing but "atoms" about;  
 They groped up and down in the darkness,  
 Or ran in irregular rout:  
 At length seized by "gravity's" impulse,  
 They all rushed away after one  
 And clashing around it struck fire, so  
 They formed the bright spherical sun!  
 The heat soon expanded his body  
 To most disproportionate size;  
 And Sol felt himself solitary,  
 Lone occupant then of the skies:  
 With labour he threw off young star-suns,  
 To occupy parts unexplored;  
 And kept but a few suns about him,  
 Not liking too much to be bored.  
 The planets he tied to his body—  
 The rest he could never restrain—  
 And these fled the centre, for freedom,  
 But strong was great "gravity's" chain!  
 Our world as she whirled—hot and plastic—  
 Made herself like her father the sun;  
 But as the long ages rolled over  
 Her blazing and brightness got done.  
 However, at length germinated  
 In a quiet old "Cambrian" spot,  
 From Sunshine and mud in solution,  
 "A shapeless albuminous dot:"  
 He could "push out an arm when he wanted,"  
 He learned to "catch prey, so he thrived;"  
 And from him, our mighty ancestor,  
 All life on the planet's derived!  
 Then "active Ascideans" evolving  
 Fresh forms he contrived in his spleen,  
 Legs, limbs, improvised for the sexes,  
 All sorts up to twelve or sixteen:  
 The strongest the beautiful choosing—  
 The "fittest" survive on a Ball—  
 And beauties the weak ones refusing,  
 The weakest soon "went to the wall."  
 Too many limbs proved inconvenient,  
 For "mammals" which came into view;  
 He therefore dropped ten or a dozen,  
 Reduced them to four, or to two:  
 Made monkeys four-legged, or four-handed,  
 Evolving in time into men,  
 With two legs, and two hands for labour,  
 And toe-fingers, remnant of ten.  
 So on through the ages still future  
 The world will keep "whirling" about,  
 The "law of survival" is cruel,  
 It threatens to make *me* drop out:  
 I'll eat then and drink, for to-morrow,  
 The Book is right here—we shall die;  
 And after—ah me! this here—after—  
 Suppose I've believed but a lie!

Copied from the Leicester Free Press, Saturday, October 10th, 1891. and contained in the Satire by "Zetetes,"—See Advertisements].

## CORRESPONDENCE.

Letters intended for publication in the "The Earth Review" must be legibly written on one side only of the paper, and must have some bearing on the subject before us.

The Editor cannot, of course, be held responsible for the various opinions of his correspondents.

All letters must be prepaid, and addressed,

"ZETETES," *Plutus House,*  
*St. Saviour's Road,*  
*Leicester, England.*

To the Editor.

DEAR SIR,—It is reported that Colonel Dulier has brought out an "ingenious apparatus for washing smoke." It was also reported that Lord Armstrong, at the banquet given to the members of the British Association at Newcastle, said, "there is after all some connexion between smoke and science." Beyond all question of doubt Lord Armstrong is perfectly right, as I know you will ultimately prove, but I write to ask, if you are in possession of any information as to the fact or otherwise, whether there is a smoke washing apparatus to be placed in every observatory in the United Kingdom to wash away the smoke of the globe? Your kind reply will be esteemed by

BALAAAM'S ASS.

Our correspondent who signs himself *Balaam's Ass*, has asked us a question we are not able directly to answer. He might obtain the desired information by writing to the officials at the Royal Observatory, Greenwich. No doubt an apparatus for "washing smoke" would be very useful in such places. Astronomers often complain of particles of dust, or smoke, obstructing their field of view when they look through their powerful telescopes. But if an apparatus could be devised for washing from off their own own visions much of the philosophic, and scientific smoke which prevents them seeing Nature as she is, it would indeed be a useful and an ingenious invention. Let us hope that our EARTH REVIEW may help them in this matter.

Scientists are generally alive to the smallest particles of dust and smoke which may obstruct the visual ray, or

interfere in the least degree with the results of their experiments; but few of them seem to think it necessary to guard against the mental smoke of prejudice and early training, especially in the matter referred to by our correspondent, "the smoke of the globe." It is not very long ago that Galileo was condemned, as a philosopher and a Christian, for teaching that the earth was a moving ball, rolling on nowhere; but now it is considered a sign of mental incapacity to doubt it. But why so? Let our learned men honestly apply themselves to the fundamental question as to whether the Earth be a globe, or a plane, and they will find that the globular theory has been enveloped in much more Scientific Smoke and dust than most people are aware of. It will be the object of *The Earth Review*, in future numbers, to help to clear away some of this accumulated philosophical smoke, so that our readers may get to know whether we are living on a star, or planet, shooting through "space"; or whether, as our senses attest and the good old Book declares, we are living on an "outstretched" earth, "founded upon her bases, that it should not be moved for ever." *PSA. c. iv. 5.* REV. VER. MARGIN.

AUCKLAND, NEW ZEALAND.

NOVEMBER 2ND, 1892.

DEAR SIR,—A short time ago someone sent me five pamphlets, called "Cranks" from London, the name on the wrapper was ——. I am not acquainted with the gentleman, but I can truly say I feel very grateful for them, and shall circulate them among my friends. I have only very recently

become acquainted with any of the facts relating to the plane Earth subject through the kindness of Mr. J. T. B. Dines, Auckland, and they certainly appeal to my common sense and reason as indisputable proofs. Above all I am glad that so much testimony can be got from the "Sacred Writings" in corroboration of the facts of Nature. I have sent to Mr. W. Carpenter for one of his "100 Proofs." It is pleasing to find that we have one grand foundation truth, Water Level and not Convex. I should like to get some more information on the subject, or reading matter. Are there any regular publications issued? Would you kindly send me a list of publications, also best method of sending payment for the same.

I suppose N.Z. Stamps are no use at Home.

Have you any leaflets on the absurdity of atmospheric pressure?

Hoping to hear from you at your earliest convenience.

I remain, yours respectfully,

GEO. REVELL.

We may inform our N.Z. friends that P.O. Orders can be made payable to us in English money, and if a few of our Colonial friends would join, a number of pamphlets and papers could be sent to the same address.

We have already forwarded a few papers to our correspondent, and hope to hear from him again soon. Probably our indefatigable Secretary will send copies of *The Earth Review* to him.

Our esteemed London friend, who generously helped us to publish "Cranks," will be glad to know the cause is progressing well in New Zealand, at the so-called "Antipodes." Our friends, however, seem to have their heads right side up! *Ed. T.E.R.*

BELFAST,

MONDAY, DEC. 12, 1892.

DEAR SIR,—My lecture according to programme has been delivered. I had an audience numbering between 70 and 80, and from enquiries made and interest displayed, together with demonstrations of approval, I have reason to believe that my efforts have been somewhat of a success. But even should this not have been the case, I consider

it a privilege to be permitted to proclaim the truth which is at such a discount nowadays.

My audience was mixed. The poetry from your *Satire* was well received by all, and it was understood by those who were not able to follow the more difficult portions of the Lecture; and I proclaimed the name of the author with no uncertain sound.

I shall circulate the New Organ with pleasure; and be glad to have anything fresh on this interesting subject.

Will you please forward me some copies of "The sun-dial," two or three "Do the Bible and science agree,"? and a few leaflets on "Bible Astronomy," for which I enclose 2/-.

Yours very sincerely,

J. ATKINSON.

The following was refused insertion in "The Faith."

To the Editor of THE FAITH.

32, BANKSIDE, LONDON, S.E.,

AUGUST 20, 1892.

DEAR SIR,—Pardon the liberty I take in addressing you. Believe me I should not do so only that I see you intend to exclude from the pages of your invaluable pamphlet a subject of the utmost importance to the faith of God's people.

Lady Blount in this month's issue of "The Faith" informs us that she believes in the Scriptural (not the Scientific) account of Creation, and that that account is, that the earth is a circular, and stretched out plane. Is this God's truth Sir? And if so, Why close your columns to it and declare that "The Faith" has no testimony to bear to it?

If the first chapters of Genesis are not an accurate and *literal* account of the Creation, the whole Bible is a lie, and the Christian Faith is folly in essence. Can you Sir as a Christian professedly seeking to defend God's Truth permit "the gaze of the people to be to man" instead of to God's unchanging, unerring Holy Word, and not lift up your voice in testimony? Are you not by your fiat hindering the fulfilment of the Divine injunction on

the first page of your pamphlet to "contend earnestly for the faith which was once for all delivered unto the saints"? You invite contributions about Spiritualism, Theosophy &c., these are but forms of demonology, and what is the so-called science of Modern Astronomy but *the same*? I can understand the Editors of "Science Siftings" excluding from their pages the truth of God, but I cannot understand a Christian Editor of a periodical of the character of "The Faith" doing the same. Surely it becometh us to fulfil

all righteousness "for God's" glory sake. May I add that I believe that full liberty of discussion on *all* matters of faith, would increase, not only the size, but also the circulation of "The Faith."

With Christian regards and wishes.

Believe me, yours respectfully.

JNO. WILLIAMS.

Cyrus E. Brooks, Esq.

## PERSPECTIVE.

FROM THE FUTURE OF DEC. 1892.

SIR,—I should like to say a few words in reply to "Enquirer." His criticism of the "One Hundred Proofs" I shall leave Mr. Carpenter to answer. I am pleased to find that "Enquirer" has the candour to admit that "the effects of perspective alone are sufficient to compel the removal of the time-honoured mistake of the hull-down 'proof' of the sphericity of the earth." Yet this is generally considered to be one of the best popular proofs of the globe theory. But I think "Enquirer falls into a very common error when he says: "At length, when the apparent horizon is overpassed by an outward-bound ship, its hull gradually disappears." Now, according to the rules of perspective, objects below the level of the eye appear to rise to a point, or line, on a level with the eye as they recede; but they never appear to rise above it, or "overpass" it, and then go down. The apparent horizon is always seen on a level with the eye of the spectator; therefore, if the hull of a vessel be below the line of sight when it starts out on its outward-bound voyage, it will, as long as it is visible, remain below the horizon. It will never overpass the horizon, or be seen above or on it; but the hull will disappear before it quite reaches the vanishing point. As "Enquirer" remarks: "Such instances should be noted and stated with exactness." Last year, when I was staying at Brighton, I watched the disappearance of out-going hulls with this special point in view. I pointed out this fact to others, who acknowledged I was right. Vanished hulls can often be rendered visible again by means of a good telescope. This proves that they have not gone down below and beyond the horizon.

In regard to the eclipse of the Moon having been occasionally observed while the Sun was also visible above the horizon, this we regard as a proof that the earth is not a globe. The fact can be explained without the aid of the globe theory. "Enquirer" admits the fact, but he assumes that we must be ignorant of "the elementary knowledge" he so

kindly supplies. Like many others, he cannot argue in favour of the globe theory without innocently assuming the question at issue. For instance, he says, "Atmospheric refraction raises a distant object 33', an amount which exceeds the apparent diameter of the Moon or the Sun; and by consequence, both luminaries may be visible at one moment from one region of the earth's surface." This reasoning quietly *assumes* one or both luminaries to be actually below the horizon, yet he admits that "appearances are sometimes treacherous." Although the Sun appears to be set, it does not follow that the body of the Sun is actually below the earth. Perspective and the earth's atmosphere are sufficient to account for the phenomena of sunset, without necessitating the belief that the orb has really gone below the horizon. Now, the assumption of the globularists that it is the earth's shadow which eclipses the Moon, requires the further assumption that either the Sun or the Moon is actually below the earth at the time of the eclipse of the Moon. Then, a third assumption is made to explain the fact that both Sun and eclipsed Moon are visible at one and the same movement (from the top of the earth); and this assumption, in order to fit with their theory, is that "atmospheric refraction raises a distant object." The fallacy of any one of these several and subtle assumptions would be sufficient to vitiate the whole argument in support of the globe theory. If the earth were really a globe, it would be impossible to see from the same place, at the same time, two apparently and comparatively small orbs, in exact opposition, on either side of the earth. It would take up too much space to show this by diagrams, or I would do so. One of the orbs would be at least 90° below the visible horizon, and our friends do not surely claim that atmospheric refraction can bring up a body 90° above that horizon. At another opportunity, I should like to deal with the greatest assumption of all, viz: Solar attraction or "Gravitation," without which the globular theory falls to the ground.

Leicester.

ZETETES.

We are glad to report that the Editor of *The Future*, has, during the past year, had the courage to admit several letters discussing the important question of "The Shape of the Earth."

Ed. T.E.R.

## HONEST AND NOBLE CONFESSIONS.

"When we consider that the advocates of the earth's stationary and central position can account for, and explain the celestial phenomena as accurately, to their own thinking, as we can ours, in addition to which they have the evidence of their *senses*, and SCRIPTURE, and FACTS in their favour, which we have not; it is not without a shew of reason that they maintain the superiority of their system. . . . However perfect our *theory* may appear in our estimation, and however simply (?) and satisfactorily the Newtonian *hypothesis* may seem to us to account for all the celestial phenomena, yet we are here compelled to admit the astound-

ing truth that, if our premises be disputed, and our facts challenged, the whole range of Astronomy does not contain the proofs of its own accuracy."—*Dr. Woodhouse, a late professor of Astronomy at Cambridge.*

MY "BELIEF." "I believe in the Scriptural, and not in the so-called 'scientific' account of Creation. I believe that the Earth is a circular and out-stretched plane; and that it will 'not be removed for ever.' I believe that the Sun, Moon, and Stars are what they appear, mere lights made to serve this earth; and that the heavens form a canopy or tent-like covering, to encircle it."—LADY BLOUNT. [See the full expression of her Ladyship's "Belief" in *The Faith* for August, 1892].

THE following was the official confession, in 1616 A.D., of the Church of Rome, when confronting the then Astronomical innovator, Galileo, who recanted and publicly confessed that his doctrine of the earth's motion was false:—

"I.—The proposition that the Sun "is the centre of the World and immovable from its place, is absurd, philosophically false, and formally heretical; because it is expressly contrary to the Holy Scriptures."

"II.—The proposition that the Earth is not the centre of the world, nor immovable, but that it moves, and also with a diurnal motion, is also absurd, philosophically false, and theologically considered, equally erroneous in faith."

"And so we say, pronounce and by our sentence declare, decree, and reserve, in this and in every other better form and manner, which lawfully we may and can use. So We, the subscribing Cardinals pronounce."—

"This 26th day of February, 1616."

(SUBSCRIBED BY SEVEN CARDINALS).

"I AGREE with you in your contention respecting the Earth; for my motto has long been, 'Let God be true and every man a liar.'"

REV. W. E. BULLINGER, D.D.

"IT may be a surprise to find that we are still imperfectly acquainted with the exact figure of the Earth." *Daily Chronicle* (science notes) April 8th, 1891.

"THE whole of Astronomical science, so far as the stellar universe is concerned, is founded upon a false basis. This arises from the fact that the construction of the heavens in respect to the apparent arrangement of the stars in space is always erroneous, and yet necessarily all astronomy is founded upon this supposititious situation of the stars."—*The English Mechanic, Jan. 4th, 1889.*

"WHOEVER considers aright will acknowledge, that, next to the Word of God, the most certain cure of superstition, and the best aliment of faith, is the knowledge of Nature." LORD BACON.

"THESE (Bereans) were more noble than those in Thessalonica, in that they received the Word with all readiness of mind, and searched the Scriptures daily, whether those things were so." *Acts 17: 11.*

Let us follow their example in searching into the book of Nature.—Ed. E.R.

THE "Catholic World," says; "The defence of the sacred Scriptures is to-day the great talk of the Christian apologist, and most of the attacks that are made upon the Bible are based upon scientific theories of some kind or other." "But," it adds, "the Christian has nothing to do with *defending the sacred Scriptures.* The Word of God is quick (living) and powerful and sharper than any two-edged sword, piercing even to the dividing asunder of soul and spirit and of the joints and marrow and is a discerner of the thoughts and intents of the heart, *HEB. iv. : 12. It is fully able to defend itself;* what the Christian wants is THE SACRED SCRIPTURES AS A DEFENCE FOR HIM. To those who dwell in the secret place of the Most High, the promise is, His TRUTH shall be thy shield and buckler. Those who profess the religion of Christ need such an acquaintance with the sacred Scriptures, that they will not be alarmed lest that ROCK should be *overturned* by idle 'scientific' theories."

## CUTTINGS AND REMARKS.

### A very distinguished Visitor.

We have no desire to unduly alarm our readers, but our duty to the public compels us to announce *that to-night a collision may be expected between the earth and a comet.* The notice we give is somewhat short, so short indeed that if the worst comes to the worst, some distant readers may have barely learned the fact before the shock gives it an emphatic confirmation. The Rev. M. BAXTER has somehow or other overlooked this noteworthy prediction, an oversight possibly accounted for by his feverish desire to discover some unfortunate individual who may be publicly described as "The Beast" without running foul of the law of libel. . . .

Just at present it is perhaps risky to speak disrespectfully of comets, but it

is undeniable that they are chiefly distinguished by their eccentricity. They resemble in no small degree political parties. They consist of a definite point or nucleus, with a remarkably nebulous tail preceding or following the nucleus. The tail precedes the nucleus when the comet has passed its perihelion and is receding from the sun, and it follows it when the sun is approached. That is to say, it is always to the front in a retreat and in the rear in an attack. As with the humble members of political parties, its distinguishing feature is prudence. Nor does the resemblance end here, for astronomers assure us that comets' tails are noted for their extreme tenuity. Stars which the slightest fog completely obscures shine through *millions* (?) of miles of their transparent material. In the same way it is easy to see through

the motives and tactics of the political hanger-on. The nucleus is really the only part of a comet which need be noticed by practical men. The vaporous tails have frequently come within the earth's attraction (?) and have been absorbed into its atmosphere, just as the Liberal Unionists have been "merged" into the Tory party. *Whether the effect of the absorption of a comet's tail into our atmosphere has been salubrious or deleterious, or even if the event has had any perceptible influence at all, is only a matter of speculation among the learned.* This extremely negative result resembles the action of homœopathic medicines upon the human frame—at least, as described by allopaths. The moral seems to be that the world will be wise if it carefully avoids the nucleus to-night and collides simply with the tail. "Run into something cheap," shouted the economical peer to his coachman when his horses bolted down Piccadilly.

Mankind has received comets in various moods. Sometimes they have been hailed with rapturous welcome. They have been supposed to herald a superior wine vintage. The produce of 1811 and of 1858 was specially announced as "comet wines," and toppers declared that it was very good. On the other hand, these eccentric heavenly bodies have been regarded with hatred and terror. They were included in a very uncomplimentary prayer in the year 1456. The Turks had just captured Constantinople, and it was feared that they would soon overrun Europe. A comet was hovering about at the time, and the pious of the day added to the Ave Maria the following special supplication: "Lord, save us from the devil, the Turk, and the comet." It is strange that at the end of the nineteenth century we should be threatened by the same three influences. The first seems destined to be always with us, the second will haunt us until the Eastern Question is really settled, and

the third threatens to mend or end us to-night.—*From the Morning Leader, London, November 21st, 1892.*

### A fearful Collision—

BETWEEN A ROCK AND A WREATH OF SMOKE!

A Dalziel Telegram, dated Philadelphia, November 24, says Professor Synder, instructor of astronomy in the High School here, states that the earth last night collided with a comet in the Andromeda group and shattered it to pieces. This theory is *said* to receive confirmation (!) by news from Illinois and other States, where there was a great fall of meteors. These are *supposed* to be the remains of the defunct comet.—*Reynolds, November 27th, 1892.*

In the above paragraph the words "said," and "supposed," which we have underlined, are very properly inserted by the thoughtful editor; but the Astronomical "Professor" has not been so cautious in boldly affirming that the earth "collided with a comet," and "shattered it to pieces." But he probably presumed either upon the ignorance, or the credulity, of the students in the "High School;" or upon his own self-sufficient authority as a learned "Scientist." Many of these "highly" learned men seem to think it utterly superfluous to offer "proofs," or "reasons," for their self-confident assertions. But, as the earth's supposed revolution has never yet been proved, he might as well have talked of a great mountain colliding with a little wreath of smoke! A little more "Scientific Smoke" for our correspondent "B.A." to clear away?

ED. T.E.R.

### The Globe Shining!

"As seen from the moon, the earth would appear four times greater in diameter, and thirteen times wider in surface than the moon does to us. The

illumination of the earth is fourteen times greater on the moon than that of the moon on the earth."—*Homeland, December 8th, 1892.*

Proof wanted of the above statements.

Fancy our "dull distant mountains" shining "fourteen times" brighter than the moon, and yet we "can't see it"! Perhaps we need "glasses"—astronomical ones?

ED. T.E.R.

"A disquieting feature of the recently issued yearly return of shipping casualties is the increase in the number of missing sailing vessels, which rose

from 46 in 1888-89, and 26 in 1889-90, to 64 in 1890-91."

We need not be astonished at this when we remember that all our Mariners are taught to believe the absurd theory that they are navigating a whirling globe, instead of sailing on the "level of the sea." It is a sad reflection on the boasted "science" of the nineteenth Century.

ED. T.E.R.

Said Tim to Mickey: "Do you believe the Earth turns round?" "Oi do," replied Mickey, "whin Oi'm drunk; but not whin Oi'm sober."

## THE NEW SCRIPTURES.

ACCORDING TO TYNDALL, HUXLEY, SPENCER, AND DARWIN.

- 1—"Primarily the Unknowable moved upon comos and evolved protoplasm.
- 2—And protoplasm was inorganic and undifferentiated, containing all things in potential energy; and a spirit of evolution moved upon the fluid mass.
- 3—And the Unknowable said, "Let atoms attract"; and their contact begat light, heat, and electricity.
- 4—And the Unconditioned differentiated the atoms, each after its kind; and their combinations begat rock, air, and water.
- 5—And there went out a spirit of evolution from the Unconditioned, and working in protoplasm by accretion and absorption, produced the organic cell.
- 6—And cell, by nutrition, evolved primordial germ, and germ developed protogene; and protogene begat coozoon, and coozoon begat monad, and monad begat animalcule.
- 7—And animalcule begat ephemera; then began creeping things to multiply on the face of the earth.
- 8—And earthly atoms in vegetable protoplasm begat the molecule, and thence came all grass and every herb in the earth.
- 9—And animalculæ in the water *evolved* fins, tails, claws, and scales; and in the air, wings and beaks, and on the land they sprouted such organs as were necessary, as played upon by the environment.
- 10—And by accretion and absorption came the radiata and mollusca, and mollusca begat articulata, and articulata begat vertebrata.

- 11—Now these are the generations of the higher vertebrata, in the cosmic period when the Unknowable evolved the bipedal mammalia.
- 12—And every man of the earth, while he was yet a monkey, and the horse while he was a hipparion, and the hipparion before he was a an oredon.
- 13—Out of the ascidian came the amphibian and begat the pentadactyle ; and the pentadactyle, by inheritance and selection, produced the hylobate, from which the simiadæ in all their tribes.
- 14—And out of the simiadæ the lemur prevailed above his fellows, and produced the platyrhine monkey.
- 15—And the platyrhine begat the cærrhine, and the catterhine monkey begat the authropoid ape, and the ape begat the longimanous orang, and the orang begat the chimpanzee, and the chimpanzee evolved the *what-is-it ?*
- 16—And the what-is-it went to the land of Nod, and took him a wife of the longimanous gibbons.
- 17—And in process of the cosmic period were born unto them and their children, the anthropomorphic primordial types.
- 18—The homunsulus, the prognathus, the troglodyte, the autochthon, the tarragen, these are the generations of primeval man.
- 19—And primeval man was naked and not ashamed, but lived in quadrumanus innocence, and struggled mightily to harmonise with the environment.
- 20—And by inheritance and natural selections did he progress from the stable and homogeneous to the complex and heterogeneous ; for the weakest died and the strongest grew and multiplied.
- 21—And man grew a thumb, for that he had need of it, and developed capacities for prey.
- 22—For, behold the swiftest men caught the most animals, and the swiftest animals got away from the most men ; wherefore the slow animals were eaten and the slow men starved to death.
- 23—And as types were differentiated the weaker types continually disappeared.
- 24—And the earth was filled with violence ; for man strove with man, and tribe with tribe, whereby they killed off the weak and foolish, and secured the survival of the fittest.”—*From the "Rainbow," and copied from an American Journal.*

If it require *faith* to believe the grand, simple, and reasonable account of Creation given in Genesis, how much credulity and gullibility does it require to swallow down this new gospel of Evolution ?

ED. E.R.

## GLOBE TINKERING,

OR GAS METORITES.

Our esteemed Editor has privileged me with the reading of an article to appear in this number entitled, "University Extension." In that article he has Sampson-like felt for the pillars of modern Astronomy, doubtless, with the intention of pulling down that "house of cards." He knows that the so-called sciences—which in the point of fact are not science at all, but mere speculations, or a contrivance to explain phenomena—have not got the shadow of *practical* demonstrated proof, either of globularity or mobility to support them ! If confirmation of this is needed, it can be found in the *Daily Chronicle* (April 8th, 1891). There we read a confession of ignorance with respect to the shape of the earth. "It may be a surprise to find that we are still imperfectly acquainted with the exact figure of the earth" ! But how did the savants manufacture our whirling, twirling, tumbling, rotating seven-motined globe ? Why, they *imagined* that it was one, and hence they can never demonstratively prove their speculations, by a practical appeal to nature ! Having imagined the earth to be a globe, they set about to find out its origin by other speculations. For instance, Professor Laplace "*supposed* the solar system to have originally consisted of a mass of Gas in rotation" ; and, lo and behold ! as it "cooled it contracted," and by consequence "rotated more rapidly, until at length, it became so much flattened, that it could no longer subsist in a single shape," therefore it began to evolve and "shed a ring." This loss is said to have caused the "central portion" to contract still further, until a second crisis arrived, when again by the process of physical evolution—not the man-monkey evolution of the Darwinians—"another ring was shed" ; and then another, and another, *ad infinitum*. Subsequently these rings coalesced into planets, and the central portion formed the Sun !

Now, Sir, some time after this speculation had been accepted by scientists, there arose another Professor by name *Lockyer*, who by another supposition proved Laplace to be in gross error on the "matter," and taught us, that the immediate antecedent condition of the Sun and planets ("the earth," they say, "being a planet") was not gas at all, but, "that they consisted of a swarm of loose stones or meteorites" ! Is it any wonder that Lord Bacon in his *Novum Organon Scientiarum*, ch. iv., speaking of the origin of systems of philosophy says, "if it (the origin) be false and erroneous, whatever immediately arises from it must of necessity be false also" ? This is self-evident.

Now Lord Kelvin, the President of the Royal Society, at the anniversary meeting at Burlington House, on Nov. 30th, spoke of the sun's rotation, and thus contradicted Sir Isaac Newton, who, in his "Principia,"



says that the sun is "immovable." How in the name of common sense can an immovable thing rotate? Will these gentlemen condescend to answer? If they do, perhaps they will also inform us how meteorites can overcome the frictional resistance of a rotating sun? How can meteoric matter overcome the frictional resistance of their seven motioned globe? If the orbital speed of this "globe" is "over one thousand miles a minute," what chance is there of meteoric dust falling on to such a flying Dutch Cheese-shaped affair? In the interest of the public whose money they spend, I challenge the Astronomer Royal, Lord Kelvin, or any official astronomer, to answer these and similar questions.

Lately we have been informed by a cheap Science Sifter, that "the Sun is a frozen mass eternal"! To say that these contradictions and speculations are more or less than absolute falsehoods would be superfluous. Therefore I await some reply; and no doubt we shall have to wait long enough.

J. WILLIAMS.

### "SCIENCE SIFTINGS," SIFTED.

*To the Editor of The Earth Review.*

SIR,—The following is a copy of my letters to the Editors of "Science Siftings," with their replies. You will see by them, that although they say they will "endeavour to distinguish fact from hypothesis, truth from falsehood" (No. 1), yet when put to the test, they utterly decline to do anything of the kind.

JULY 9TH, 1892.

*To the Editor of Science Siftings.*

SIR,—In your issue for June 4th, 1892, you state, that, "the curvature of the earth is 8 inches for 1 mile, 32 for 2 miles, and keeps on increasing as the square of the distance for longer distances." Now by this rate the curvature of 90 miles is 5,400 feet. Therefore an object at 20 miles distance, the height of which is 1,000 feet, could not be seen at that distance. I presume that you are aware that there is another rate of curvature in existence which is the product of modern astronomy, viz:—2'04 inches to the mile, multiplied by the square of the distance in miles? Now, even by this rate it is evident that an object 1,000 feet high could not be seen at 90 miles distance, for it would be hid behind a curve, over 1,300 feet. Now I come to *practical facts*. The Eiffel Tower is not quite 1,000 feet high, but its top can be seen at a distance of over 90 miles!! Now Sir, let me ask you how on globular principles, this is to be rationally accounted for? I trust in the interests of truth you will kindly publish this letter in your next issue, and your reply thereto.

On July 9th, the following appeared. "The paradox referred to in your letter is apparent only. It is true that there are two ways of reckoning the earth's curvature: but one refers to the arc, the other to the chord of the circle. It was of the last that we spoke in the paragraph you refer to. Within moderate limits, it may be assumed that the chord of the terrestrial circle, joined the eye of an observer with the base of a distant vertical object, represents the hypotenuse of a right-angled triangle, of which the vertical object forms one of the sides. Hence the simple rule that the height of this object, when just visible, is proportional to the square of the distance along the chord, which, although not an absolutely accurate rule, is sufficiently nearly so for many practical purposes."

Comment on this is hardly necessary. But on August 20th, I wrote as follows;—

AUGUST 20TH, 1892.

*To the Editors of Science Siftings.*

GENTLEMEN,—Permit me to call your attention to the introduction of yourselves to the public as given in No. 1 of "Science Siftings."

There you promised to "distinguish fact from hypothesis, truth from falsehood." This you have not done, for, to go no further, your reply to me in "S.S." of July 9th, is a direct contradiction of it! When you can prove your globe has two circumferences, then, and then only, will your reply be consistent with logical reasoning and common sense. You know as well as I do that your reply is not true, and that it is *only* theory and utterly false, hence it is you are obliged to have resource to *assumption*.

In Vol. i. p.38. you say, "since water finds its own level, it is compatible with the theory (*theory* mind) of a spherical or oblate World, that the sea is a plane of Water, &c.

Is it possible you do not see the contradiction which exists in this grandiloquent statement, with which is coupled the sarcastic question to a friend of mine about "tumbling over the edge"? "The sea being a plane" as you admit, the World cannot be a globe. How in the name of common sense can a plane of water be a part of a sphere or oblate globe? Do you not see that the thing is a practical and moral impossibility? Is that the reason why you told "E. J. Cooper" (Vol. II. No. 41. p.210) that "flat earth theories are kicked out of your columns"? I do not Sir want the £1,000 you offer, but I do want the truth of *practical science* to be known by the people, and I therefore challenge the Astronomical Editor to prove the earth to be a spinning and whirling globe, by an appeal to demonstrated facts found in Nature. I will prove it is *not*, if you have the manliness and courage to open your columns for the elucidation of the truth of the subject.

Yours respectfully, JOHN WILLIAMS.

P.S.—I enclose a £1,000 challenge in the hope that you will accept it. J.W.



THE FOLLOWING REPLY WAS GIVEN IN THE ISSUE FOR SEPT. 10TH.

"We cannot think of accepting your challenge. The "reward" of £1,000 is doubtless a hoax on the part of someone who has simply invented the American references. Not a cent could be recovered from anybody, upon the strength of such a "startling offer" as is published upon the hand-bill. Then apart from this, most of our readers have been educated past flat earth hypotheses. And if we devoted to these such an amount of our space as would be needed for the rigid demonstration of the motions and form of the earth, *Science* Siftings would be considered uninteresting, and its demonstrations redundant. Then our circulation would be converted from an increasing to a decreasing one. Probably this last consideration has not presented itself to you; but we cannot lose sight of it."

So we see that these gentlemen evidently distinguish between truth and £ s. d.; and they chose the latter. Comment is needless.

Yours &c., J. WILLIAMS.

### Highly Educated.

BY M. A. BUXTON.

Miss Pallas Eudora von Blurky,  
Who didn't know chicken from turkey,  
High Spanish and Greek  
She could fluently speak,  
But her knowledge of poultry was murky.  
She could name the great-uncle of Moses,  
The dates of the Wars of the Roses,  
The reason of things,  
Why the Indians wore rings  
Through their red aboriginal noses.  
The meaning of Emerson's "Brahma,"  
Why Shakespeare was wrong in his grammar;  
And she went chipping rocks  
With a little black box,  
And a small geological hammer.  
She had views upon co-education,  
And the principal needs of the Nation;  
Her glasses were blue,  
And the number she knew  
Of the stars in each high constellation.  
She expounded the use of bacilli,  
And learnedly lectured on calci;  
Her costume was mannish,  
Her ways very clannish,  
'Mongst the Cult and the 'Varsity foci.  
She wrote in a handwriting clerky,  
And spoke with an emphasis jerky;  
High German and Greek  
She could fluently speak;  
But—she didn't know chicken from turkey.

From the "Yankee Blade."

# THE EARTH—NOT A GLOBE—REVIEW.

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 2.

APRIL, 1893.

PRICE 2D.

## To our Readers.

†N again presenting ourselves as it were before our readers we desire † to thank all those who have since our last issue helped forward the cause of God and of Truth. Some have aided us by encouraging words, others by good service in spreading abroad our literature, and a few in nobly sacrificing of their means so that the Word of God may have free course, run, and be glorified. To all these the society owes its best thanks, and gratefully acknowledges its indebtedness. Let others join our ranks, and help us by their subscriptions to keep the *Review* afloat, like the trim little bark that she is, so that it not only may be published more frequently, but the burdens which are now resting on a few may be more equally borne by the many. The workers in the good cause freely give their time and their services; but printers, type-setters and others necessarily require paying for theirs. All honour to those who are making sacrifices for the truth. They have a peace and a pleasure in it now in saving the doubtful from shipwreck, and they will have an exceedingly great reward and joy hereafter.

### A WORD OF COUNSEL.

But there are friends who are only just beginning to enquire into these matters, to see whether these things are so: they need a word of advice and counsel. It is *Patience*. Another word is *Perseverance*. You cannot expect all difficulties to be cleared away at once, in one number or in one pamphlet. The errors of a lifetime are not so soon eradicated. We have done something already if only to make you doubt the globular theory. You should demand proof of *that* theory first. When you find this is utterly baseless you will be the more disposed to entertain the truth. One correspondent writes a very good letter, but he manifests a little impatience and doubt. His letter is long, but we will quote the most important parts: He says;—

"I cannot prove that the earth is a globe, or that the theories of Astronomers are founded upon anything more positive than human speculation; as it is evident, even from a cursory reading of astronomical works, that the proofs with which astronomers are satisfied are extremely flimsy, unsubstantial things, in fact, not proofs at all; being nothing more than strange coincidences, which can be multiplied to any extent, whether we take the globe theory or the plane theory for the starting point. For instance, while they find in the nebula theory that there are several *different appearances which they term different stages of development*, the astronomers have never yet seen a lower stage develop into a higher; in other words, they never saw nebula evolve into a star, nor even undergo any transformation, so much as even *one* step in that direction. In admitting this, they give away their own theory. Their argument is no better than that of the geographical evolutionist, who, seeing various forms of animal life, coinciding in appearance, with the various stages of human development from conception to birth, jumps to the profound conclusion that human beings were primarily evolved from just such animals, and in just such order, from protoplasm. With such facts of nature before me, I should rather conclude that *the Creator designed to teach us that he has power to put life, and a certain amount of intelligence, even into matter framed just as we are before we are born, from germ up to fully-developed infant.* This is perfectly logical and reasonable, while the other view is absurd, although it tends to magnify human wisdom. No wonder the Lord says "The wisdom of this world is foolishness with God."

Because, as with the astronomer, so with the geologist, not one of them can find any example, either living, dead, petrified, or skeleton, wherein a change from a lower order to a higher can be discerned, nor from higher to lower. All, so far as the evidence goes, remain on just the same plane in which they were created, no change of species being discernible. If God so chose to make them in the first place; what could hinder him from doing so? These scientists are the wisest fools of modern Christendom. God has given them great talents of knowledge, wisdom, and influence, and they will shortly have to give account of them, as to why they perverted and wasted these talents in building air castles; when the same talents might have been used to advance God's glory in the way he has appointed."

This is a very good stricture on the astronomical and evolutionary theories extant; but even while hardly aware of it he is still very much entangled in the meshes of those theories, especially on the question of "degrees." We therefore propose to say a word or two about what are called

#### "DEGREES."

After stating that he is favourably disposed to the Zetetic position, our correspondent states what he thinks is an "insurmountable obstacle" to its acceptance and promulgation. As we are not at all afraid of this "insurmountable obstacle," and as we have in fact climbed over greater obstacles before, we will give it in his own words. He proceeds;—

'To show what I mean, I will take the circle called the equator, and dissect it, knowing that its circumference is not over 25,000 miles. The diameter is 7,920 miles, and radius 3,960 miles, which is also the distance from northern cen-

tre to equator. But the distance from North Pole to equator on a globe is about 6,250 miles. Therefore the difference in the length of corresponding degrees of latitude north of the equator would be considerable.

Thus, 6,250 divided by 90° equals 69½ miles, which is equal to one degree, 1° of latitude on a globe, corresponding also, according to "Parallax" to the actual measurement by the various European Governments. (?)

But with a plane the following would be the figures. Radius, 3,960 divided by 90° equals 44 miles, equals 1° longitude. But it does not measure that way, being a difference of over 25 miles in every degree of latitude between the Zetetic theory and what seems to be a well-established fact. And here is where the trouble comes in.'

Now our friend (H.W.M.) will make a very good Zetetic; and we only wish we had space to quote all he says, and all that we could reply. If we had the means we would publish a pamphlet on this subject; but at present we are compelled to be brief. In the meantime we shall welcome all *facts* upon the subject which either our friends or our foes can send us. But we must beg of them to distinguish between fact and fiction. See more on this "degree" fiction in the new pamphlet just published entitled *The Midnight Sun*. There is a great deal of fiction about these so-called "degrees." There are "degrees" of latitude and "degrees" of longitude. We must distinguish between these. As our friend shews, on a "globe" with the circumference of 25,000 miles there would be 360 degrees in its circumference of about 69½ miles to one degree. Now supposing the circle of the equator to have this circumference it would follow that a circular "degree" on the equator would be about this length although the earth be a plane. And circles of *latitude* north of the equator would have "degrees" of decreasing length, while circles of latitude south of the equator would have "degrees" of increasing length. We know, and it is admitted that these degrees do decrease north; but the question is, do they increase south? We believe they do, and we challenge any actual facts that they do not. But this is not exactly our friend's difficulty as given above. It seems to be this. A meridian of longitude on the "globe," from the equator to the "pole," would be as he says, about 6,250 miles, or one fourth of the circumference, but on the Plane such a meridian is only about 3,960 miles long. True. And 3,960 miles divided by 90° would give only 44 miles to 1° longitude, instead of 69½. True again we reply. But who says that a meridian from the equator to the North Centre should be divided by 90°? The Globularists. Ah! friend, "This is where the trouble comes in" Do you see it now? There are only about 57¼ such "degrees" from the equator to the North Centre. The astronomers have "calculated" their 90° on the *assumption* that the earth is a sphere, and the *FACT* (attested by water being level) that the earth is a plane discredits therefore every so-called "degree" of longitude either north or south of the equator. The same assumption discredits also the

French Metric system, the metre being founded upon fancy—the globular theory and its meridional “degrees”—and not upon any well established fact found in Nature. But we cannot go into this subject now.

#### PROGRESS.

The truth is consistent with itself Let all Zetetics also be so. If water be level (and Dr. “Parallax” has settled that question for us) then the earth *must be a plane*, and no amount of astronomical conjuring with “degrees” ought to unsettle our minds. Water is LEVEL: this is our sheet anchor. The earth is MOTIONLESS: this is another. We have asked in vain for proofs of the earth’s motion. Only one correspondent has attempted the proof. If space permit we shall quote some part of our reply published in a northern paper. Difficulties must send us forward, not backward. We are glad to see the cause is progressing. Addresses have been delivered in both islands by Messrs. Smith, Perry, Atkinson, Lake, and others, valiant defenders of the truth. The newspapers have been liberal enough to give us fairly goods reports, and to allow of subsequent correspondence. We tender our thanks to all those which have done so, and especially to the *Hebden Bridge Times and Gazette*, and the *Ashton Reporter*, for allowing such a copious correspondence to follow their reports of the lectures. This correspondence has astonished and alarmed some of our opponents, and pleased and encouraged our friends.

We only wish we had space for all of the letters on both sides. We would gladly print for our opponents if they would contribute towards the expense, as we have no fear of hearing both sides, *Magna est veritas et praevalabit*: Truth is mighty and must prevail.

#### “CATHOLIC BELIEF.”

“The astronomical system which had prevailed in the world down to the seventeenth century is what is called the geocentric or Ptolemaic system, by which it was supposed that the earth was motionless and that the sun went daily round it, causing the days and nights; and that the sun in the course of twelve months moved gradually forward and backward inside the equatorial zone in such a way as to cause the different seasons.”

“This was the system received by the Arabians, the Chinese, the Persians, and the Europeans. “For,” says an eminent French philosopher, “all the researches which have been prosecuted with the most scrupulous exactness have failed to bring to light any other astronomy than that of Ptolemy.” In accordance with this theory, which is so strongly and constantly suggested to our senses, is of course the language of Revelation addressed to man. Such being the state of

Astronomy from the remotest antiquity!” The Rev. Joseph Di Bruno, D.D.

After the above confession it requires some courage on the part of a dignity belonging to a church which is supposed to be infallible and unchangeable, and which condemned Galileo for teaching that the earth moves, to try to reconcile their present acceptance of the theories of modern Astronomy with their past history. Yet this is what the writer attempts; and his work is endorsed by the so called Catholic Archbishop of Westminster.

The writer admits that “till the laws of gravitation were *established* (!)\* by Newton, all the Copernicans were reduced to mere probabilities. Hence we are told by Lord Macaulay that the founder in England of the inductive school of philosophy, Lord Bacon, rejected the *theory* of Galileo with scorn; and so did “Descartes.” Bravo Dr. Bruno. It appears that we Zetetics are at least in good company as regards intelligence.

The writer admits that Galileo was brought before the Inquisition and condemned for his teaching in June 1633. He says that Galileo “was ordered to abstain from teaching, as a demonstrated fact, that the earth was in motion, as it appeared to be against the express words of Scripture. He was, moreover, sentenced to remain a prisoner at the good will of the Court, and to recite the seven Penitential Psalms once a week for three years.”

The good Doctor then tries further to excuse his church by saying, “the Protestants of that age fell into the same mistake of denouncing as warmly as Catholics the rotatory system of the earth as clashing with Holy Scripture.” In proof of this he quotes some correspondence about Kepler written in 1853, to the Editor of the London *Catholic Standard*. The letter is signed R. Raby, Munich. The writer says;

“I allude here to the condemnation of the celebrated astronomer Kepler by the Theological Faculty of Tübingen, in 1596, for affirming the identical scientific truth (?) which 37 years later got Galileo into trouble. The great majority of English Protestants, are, without doubt, ignorant of this interesting case, which I venture to think a very fair set off to their favourite story about Galileo.”

“Bailli, in his *Historie de l’Astronomie Moderne* calls Kepler ‘one of the greatest men that ever appeared on the earth,’ and ‘the true founder of Modern Astronomy.’ When he wrote his celebrated work, whose lengthy title begins with the words, “*Prodromus Dissertationum Cosmographicarum*” &c., in which he undertook *by argument* (not by practical experiments, Ed. E.R.) to demonstrate the truth of the

\* See article on “Gravitation.”

Copernican system, NOT LESS REPROBATED AT THAT TIME BY THE PROTESTANTS OF GERMANY and ENGLAND THAN BY THE CATHOLICS OF ITALY, he had to lay it before the ACADEMICAL SENATE OF TUBINGEN for their approbation, without which in the regular order of things it could not be printed. The *unanimous decision* of the DIVINES COMPRISING THIS SENATE was that Kelper's book contained a *deadly heresy*, because it contradicted the teaching of the Bible in that passage where Joshua commands the sun to stand still." Good !

On reading this we are led to ask where are the Protestants of England to-day ? Where are consistent Catholics. Are they all alike gone over to the enemies of Inspiration ? Is the predicted Universal Apostacy now setting in ; and infidelity rearing its callous face, or its masked forehead, in the name of a Science that is falsely so called, for a final conflict ? It is quite time, however, in the face of these facts, that all true and devout Zetetics, by whatever name they are called, came forward to the " help of the Lord against the Mighty." We have plenty of matter for the exposure of this modern infidel " Science," if our friends will only assist us with the means.

### " THE LAND OF THE MIDNIGHT SUN. "

The above is the title of an interesting book by Paul B. Du Chaillu, in which he describes his journeys through Norway and Sweden, Lapland and Northern Finland. In this book the writer unconsciously gives us proof that the earth is not a revolving globe such as the Astronomers teach, although of course he tries to explain the phenomenon of the midnight sun in harmony with the astronomical theories he was taught at school. While we have no space here for these theories we shall try to find room for the *facts* brought before us ; then we shall proceed to shew how these facts conflict with the globe-earth doctrine, and how they harmonise with the truth that the earth is a motionless plane, with sun revolving daily above and around the North Centre, commonly but erroneously called the north " pole."

In his preface M. Du Chaillu says ; " The title of the book is derived from one of the most striking phenomena in the north of the country, and one which I witnessed with wonder and admiration on many occasions." In chapter v. he states how, between the 13th and the 18th of June, he sailed " towards the midnight sun " in a steamer leaving Stockholm for Haparanda, " the most northerly town in Sweden," on or " near the right bank of the picturesque Torne river." The passage lasting about three days ; while, he says, " The Bothnia was not yet free from ice." He proceeds to describe

### The Journey.

" As the voyage drew to a close, and we approached the upper end of the Gulf of Bothnia the twilight had disappeared, and between the setting and rising of the sun hardly one hour elapsed."

Haparanda " is in  $65^{\circ} 51'$  N lat., and forty-one miles south of the arctic circle. It is  $1^{\circ} 18'$  farther north than Archangel, and in the same latitude as the most northern part of Iceland. The sun rises on the 21st of June at 12.01 a.m., and sets at 11.37 p.m. From the 22nd to the 25th of June the traveller may enjoy the sight of the midnight sun from Avasaxa, a hill six hundred and eighty feet high, and about forty-five miles distant, on the other side of the stream ; and should he be a few days later, by driving north on the high road he may still have the opportunity of seeing it."

This intrepid explorer then describes his journey overland from Haparanda to the Arctic sea, " the distance as the crow flies being over  $5^{\circ}$  of latitude to the most northern extremity of the land," but by the route about 500 miles. The country is inhabited by Finns, who are cultivators of the soil. The Laplanders roam over the land with their herds of reindeer. The summer climate is delightful, and during the period of *continuous daylight* one can travel all night if he pleases."

### Strange Nights.

Speaking of a station called Pajala, M. Chaillu says ; " From the high hills on the other side of the stream at this place one may enjoy the sight of the midnight sun a few days later. How strange are those evening and morning twilights which merge insensibly into each other ! to travel in a country where there is no night, and no stars to be seen ; where the moon gives no light, and, going further north, where the sun shines continuously day after day ! The stranger at first does not know when to go to bed and when to rise ; but the people know the hours of rest by their clocks and watches, and by looking at the sun."

We may mention that at Ranea, which skirts the Baltic, M. Du Chaillu was told they had snow on the ground so late as the 2nd of June, after a winter during which the thermometer had fallen to  $40^{\circ}$  and  $45^{\circ}$  below zero ; yet at the time of his visit he saw garden peas " about two inches above the ground which would be fit for the table at the end of August or the beginning of September." Referring again to Pajala he says ; " In these latitudes the snow has hardly melted when the mosquitoes appear in countless multitudes, and the people have no rest night or day." " The traveller is surprised to meet so many comfortable farms, with large dwelling houses, which with the barn and cow-house are the three prominent dwellings."

" Between the stations of Kunsijärvi and Ruokojärvi (*Färvi* means lake in Finnish) we crossed the Arctic circle at  $66^{\circ} 32' N$ , or 1,408 geographical miles (?) south from the pole, where the sun shines for an entire day on the 22nd of June, and the observer will see it above the horizon at midnight, *and due north*. After that date, by journeying north on an average of about ten miles a day he would continue to see the midnight sun till he reached the pole. On the 22nd of September the sun descends to the horizon, where it will rest, so to speak, all day long ; on the following day it disappears till the 22nd of March."

" When returning southwards at the same rate the traveller will continue to see the midnight sun in his horizon till he reaches the Arctic Circle, where for one day only, as we have seen, the sun is visible."

### The Sun's Motion.

Further quoting from these interesting travels we read ;—" The sun at midnight is *always north of the observer*, on account of the position of the earth (?) IT SEEMS TO TRAVEL AROUND IN A CIRCLE, requiring twenty-four hours for its completion, it being noon when it reaches the greatest elevation, and midnight at the lowest. Its ascent and descent are so imperceptible at the pole, and the variations so slight, that it sinks south very slowly, and its disappearance below the horizon is almost immediately followed by its reappearance."

After giving the modern astronomical " explanation " of these northern phenomena, an explanation founded on half-a-dozen unproved and unprovable assumptions, the writer naively and unconsciously owns that *appearances* are against these assumptions. He proceeds ; " The nearer any point is to the pole the longer during this time " (from the vernal to the autumnal equinox) " is its day. The number of days, therefore, of constant sunshine depends on the latitude of the observer ; and the farther north he finds himself the greater will be this number. Thus at the pole " (the north centre ?) " the sun is seen for six months ; at the arctic circle for one (whole) day ; and at the base of the North Cape from the 15th of May to the 1st of August. At the pole *the observer seems to be in the centre of a GRAND SPIRAL MOVEMENT OF THE SUN*, which, further south, takes place north of him." (*Italics ours*)

Thus we see, that in spite of educational bias and Newtonian belief, the truth will unconsciously and innocently crop up in any description which is true to the facts of Nature. But before we criticise these phenomena further we prefer first to give all the facts which the interesting writer of *The Land of the Midnight Sun* has so carefully gleaned for us. He goes on to describe

### How the Sun is seen.

" We have here spoken as if the observer were on a level with the horizon ; but should he climb a mountain, *the sun of course will appear higher* ; and should he, instead of travelling fifteen miles north, climb about 220 feet above the *sea level* (!) each day, he would see it the same as if he had gone north ; consequently if he stood at the arctic circle at that elevation, and had an unobstructed view of the horizon, he would see the sun one day sooner. Hence tourists from Haparanda prefer going to Avasaxa, a hill 680 feet above the sea, from which, though eight or ten miles south of the arctic circle, they can see the midnight sun for three days."

" There are days when the sun has a pale whitish appearance, and when even it can be looked at for six or seven hours before midnight. As this hour approaches the sun becomes less glaring, gradually changing into more brilliant shades as it dips towards the lowest point of *its course*. ITS MOTION is very slow, and for quite awhile it apparently follows *the line of the horizon*, during which there seems to be a pause, as when the sun reaches noon. This is midnight. For a few minutes the glow of sunset mingles with that of sunrise, and one cannot tell which prevails ; but soon the light becomes slowly and gradually more brilliant, announcing the birth of another day—and often before an hour has elapsed the sun becomes so dazzling that one cannot look at it with the naked eye."

### Nature Asleep In Sunshine.

Again, ascending the river Muonio, on the last day of June, M. Du Chaillu says ; " I came to Kicksisvaara, the first boat station situated on a hill commanding a fine view of the country, and overlooking the river Muonio. The people were all asleep as it was midnight ; the sun had become paler and paler, its golden glow shedding a drowsy quiet light over all the landscape, and a heavy dew was falling ; the house-swallows had gone to their nests, the cuckoo was silent, and the sparrows could not be heard." " How beautiful was the hour of midnight ! How red and gorgeous was the sun ! How drowsy was the landscape ; Nature seemed asleep in the midst of sunshine. Crystal dew-drops glittered like precious stones as they hung from the blades of grass, the petals of wild flowers, and the leaves of the birch trees. " Before two o'clock the swallows were out of their nests, which they had constructed on the different buildings of the farm. How far they had come to enjoy the spring of this remote region ! I did not wonder that they loved that beautiful but short summer, or that they came year after year to the Land of the Midnight Sun."

### Civilization North.

At a short distance from latitude  $70^{\circ}$ , near a place called Wind, on the banks of the Alten, a few miles from the sea, our traveller and writer says ; " I could hardly believe I was so far north, the birds were so numerous." Near this place at Bosekop he found a village of " scattered farms, with a church, a school; several stores, and a comfortable inn." Bosekop is the seat of a fair, and " in winter is a place of great resort for the Laplanders ; court is also held here." Here too he met with a " small society of educated people," with whom he spent a pleasant evening, and had a game of T&g. He says ; " I liked the game amazingly ; at 11 p.m., the sun shining brightly, they bade me good night, and went to their homes, leaving me full of admiration at their simplicity, innocence, and gentle manners." There also, " in  $70^{\circ}$  of north latitude, in the quiet parlour of the hotel at Bosekop," he delivered a lecture, by request, on his travels in the Equatorial regions of Africa !

Of the Alten Fjord he says ; " There is no part of our globe (!) where vegetation is so thriving *at so high a latitude* as on the Alten Fjord." He might have said that there is nothing at all like it in equal latitudes south !—*How is this pray ?*—" Near Bosekop, rhubarb, barley, oats, rye, turnips, and potatoes grow well, also carrots, strawberries, currants and peas. " The thermometer sometimes rises to  $85^{\circ}$  the warmest temperature during my stay being  $63^{\circ}$  in the shade, the coolest  $55^{\circ}$ ." Looking over a dreary waste, he says ; " from the top of the hills the midnight sun can be seen as late in the season as on North Cape, but the scenery is not so impressive."

### A Farewell View.

But we must conclude, for the present, with a brief description of the final view, from the island of Mageröe, the most northern land in Europe. The north Cape is its northern extremity. On the 20th of July, M. Du Chaillu hired a boat and landed on the island. He proceeds ;—" After a walk of several miles I stood upon the extreme point of North Cape, in latitude  $71^{\circ} 10'$ , nine hundred and eighty feet above the *sea-level*." Sea " level." (Hear, hear !). " Before me, as far as the eye could reach, was the deep blue Arctic Sea, disappearing in the northern horizon. Wherever I gazed, I beheld Nature bleak, dreary, desolate ; grand indeed, but sad. A sad repose rested upon the desolate landscape, which has left an indelible impress upon my memory."

" Lower and lower the sun sank, and as the hour of midnight approached, it seemed for awhile to follow slowly *the line of the horizon* ; and at that hour it shone beautifully *over* that lovely sea and dreary land.

As it disappeared, behind the clouds, I exclaimed from the very brink of the precipice, Farewell to the Midnight Sun."

" I had now seen the midnight sun from mountain tops and weird plateaus, shining over a barren, desolate, and snow-clad country ; I had watched it when ascending or descending picturesque rivers, or crossing lonely lakes ; I had beheld many a landscape, luxuriant fields, verdant meadows, grand old forests, dyed by its drowsy light ; I had followed it from the Gulf of Bothnia to the Polar sea as a boy would chase a will-o'-the-wisp, and I could go no further."

" I now retraced my steps to where we had left our little boat. The men were watching for us ; it had begun to rain, and when we got back to Gjesver I was wet and chilly, and my feet were like ice. I was exhausted, for I had passed two-and-twenty hours without sleep, but to this day I have before me those dark rugged cliffs, that dreary silent landscape, that restless Arctic Sea, and that serene midnight sun shining OVER ALL ; and I still hear the sad murmur of the waves beating upon the lovely North Cape."

We must reserve our further remarks, for lack of space, until another issue of the E.R. But we thought it best that our readers should first have all the facts placed before them on this interesting subject.

We may also add that in response to the wishes of friends who have seen the article, we shall print the whole of it in separate pamphlet form, with diagrams. It will be ready with this issue of the *Earth Review* and cost 2d. per copy, post free. Friends willing to help on its circulation will please to communicate with *The Editor*.

### FLABBY RELIGION.

" Much of the religion of the day is flabby indeed. It is afflicted with a sort of Saint Vitus's dance—now bending this way, and now that ; and it is uncertain which way it will wriggle next. It is almost disposed to change our Bible for a science that, instead of tracing our origin to Adam, makes us only a better order of tadpoles ; and instead of reading " Abraham begat Isaac, and Isaac begat Jacob, and Jacob begat Joseph," would read, 'The fish begat the reptile, and the reptile begat a marsupial animal, and the marsupial animal begat the inadrumana and the inadrumana begat the gorilla, and the gorilla begat the ape, and the ape begat the Darwin.'" Much of our modern religion begins with a eulogy of human nature, instead of an exposition of its utter downfall. It makes us sick to hear all this talk about the dignity of manhood. It is a heap of putrefaction, unless St. John was wrong when he described it as "wretched and miserable, and poor, and blind and naked."—*Talmage*.

But, Mr. Talmage, is not your own religion just as "flabby" when you deny that Joshua commanded the Sun to stand still? 'The Sun, not the "Globe,"'  
Ed. E.R.

## THE AGNOSTIC'S CREED.

"We do not know anything, how can we know?"  
 The Sceptic cried in despair:  
 "Then how do you know that you don't know? O, oh!"  
 Was the answer equal and fair?  
 You know that Creation; Without generation,  
 Could never occur, I suppose?  
 That our ancestors were All covered with hair  
 From the head right down to the toes?  
 Oh, yes, you know these things, and many such more,  
 Occurring in days of yore?  
 If I were Agnostic, I never would boast  
 My narrow contracted view;  
 I'd try to be humble, at least, the most  
 To think how little I knew:  
 If I truly "believed," And was not self-deceived,  
 That nothing could ever be known;  
 I'd quietly walk, And more modestly talk,  
 Nor assume such a lofty tone;  
 Lest wrong I might prove, and know less than I ought,  
 And perhaps some less than I thought!  
 And if I weren't sure that there is not a God,  
 I would not revile his Name;  
 For fear I might merit his chastening rod,  
 For having profaned the same:  
 I'd be faithful indeed To Negation's creed,  
 And own I didn't know all;  
 That things might exist My poor vision had missed  
 Upon and above this "dark ball;"  
 In fact I'd not call it a "ball" till I knew  
 The truth or not of that "view."  
 I'd never "believe" that the earth is a "globe"  
 A-whirling and flying through "space"  
 Unless I could prove it—for fear one might probe  
 My theory to my disgrace:  
 Nor would I assume, Much less fret and fume,  
 Because some are sceptical here:  
 Agnostics don't know—Yet do they think so?—  
 But let us be honest and fair,  
 Why only *one* Book in the world should we doubt,  
 And swallow down everything else like a spout?  
 I would not pretend to think "Science" was sound  
 If truth cannot be known here;  
 Nor would I presume Social-science to found,  
 It might seem funny and queer!  
 And I never would dare, At home in my chair,  
 To tell how the world should be made:  
 I wouldn't pretend To know its last end,  
 Nor call its "Foundations" mislaid:  
 And if I were ignorant of Heaven and Hell  
 I would be silent as well.  
 If I did not care for the trouble to find  
 Whatever was good and right;  
 I would not assume because I might be blind,  
 That *all* men had lost their sight:  
 Lest my footsteps should slide I would call for a Guide,  
 To save me from pitfall or snare;  
 If I heard of relief, From a beggar or Chief,  
 Who had saved some men from despair;  
 I would test his claims on myself, on my eyes,  
 I would, indeed, *were I wise!*

"ZETETES."

## CORRESPONDENCE.

*Letters intended for publication in the "The Earth Review" must be legibly written on one side only of the paper, and must have some direct bearing on the subject before us.*

*The Editor cannot, of course, be held responsible for the various opinions of his correspondents; nor can he enter into correspondence respecting articles, &c, held over or declined.*

*All letters must be prepaid, and addressed,*

*"ZETETES," Plutus House, St. Saviour's Road,  
 Leicester, England.*

## NOTES.

*Carpenter.*—Your poem shall appear in our next.

*Atkinson, and others.*—Thanks for cuttings, &c. They shall be used as space permits.

*Clarke, Belfast.*—Report of lecture received. But this and several other interesting reports unavoidably crowded out. Oh for more space!

*To the Editor.*

January 2nd, 1893.

Dear Sir,—Allow me to congratulate you on your New Magazine, which was in great requisition. Many thanks for a copy of the first issue. I shall be pleased to take fifty copies for free distribution.

I am one with you in that which is expressed in its pages, and I like it on account of its strict adhesion to the teaching of the Bible. I am also very pleased with the general appearance of the Magazine.

I sincerely trust this new and much needed organ may soon find a hearty welcome amongst all classes everywhere, so that it may not fail in its high purpose and noble aim.

We shall reap a rich reward if we hold fast to the Word of God in preference to that of man. For that Word when faithfully proclaimed will neither prove void, nor unfruitful. Let us therefore hope for *great* things and mighty victories if we hold on tenaciously to the Holy Scriptures; for the Word of God is "*sharper*" than a two-edged sword," and therefore by it we may hope to conquer.

"By the Word of the Lord were the heavens made; and all the host of them by the breath of His mouth. He gathered the waters of the sea together

as a heap. He layeth up the deep in storehouses."

Let all the earth fear the Lord: let all the inhabitants of the world stand in awe of Him. For He spake and it was done. He commanded and it stood fast. Again, according to the Law of God" Heaven is "above," earth "beneath," and the waters of the sea "under the earth." And the Psalmist says that the World was so "established that it cannot be moved." But as the Apostle Peter says, some people are "willingly ignorant" of this order of things. But as these statements are from God, and are in direct contradiction to the evolution and whirling globe theory, we may with all assurance rest satisfied of final victory over such absurd and monstrous notions.

Let us fearlessly use "The Sword of the Spirit" which is the Word of God, for by it "He maketh the devices of the people of none effect."

Trusting that such will be the case with all the false theories of men, and that atheism and infidelity will soon be uprooted.

Believe me, in the hope of Eternal Life.

Yours truly,

Bath. LADY BLOUNT.

[We are much obliged to her Ladyship for her kindly aid and good wishes. If all our subscribers would only take



a few extra copies for free distribution it would greatly help our circulation. Ed. E.R.]

BATTLE CREEK, MICH.

Dear Sir,—I have read with interest the first number of your Journal, and think it "fills the bill," the best of anything yet published. The preponderance of evidence is certainly in favor of the position you take, namely, that "the earth is established, that it cannot be moved," and that whatever the Creator says in His Word about His Created Universe, whether Sun, Moon, or Stars, Heaven, Earth, or Sea, must be true, and is true; whether anyone believes it or no. I congratulate you on the appearance, and "get up" of the Earth Review, as upon the true value of its contents, and I trust it will meet with the success it deserves.

Yours truly,

TERRA FIRMA.

[We welcome this letter from our American correspondent, who has written a good pamphlet on the subject for our Seventh Day Adventist friends over there. We will attend to the other letter sent us through him if our space permit. In the meantime our friends must have patience, and help us more if they would have us to print oftener. A few are making noble sacrifices. Ed. E.R.]

CONTRADICTIONARY.

Sir,—In the London Echo for March 28th, 1892, we are informed that, "it is a great mistake to suppose that the Sun is stationary." Now Sir Isaac Newton in the third book of his *Principia* supposes that the "centre of the system of the world is immovable."

- 1.—Are not these statements contradictory.
- 2.—If the first statement is correct, is not modern astronomy proved by its own savants to be based on "A GREAT MISTAKE"?
- 3.—Is this the "false basis" on which "the whole of the astronomical science is founded," as reported in *The English Mechanic* for January 4th, 1889?

Yours, &c.

BALAM'S ASS.

New Oriental Bank,  
40, Threadneedle street,  
London, E.C.  
7th Jan., 1893.

Dear Sir,—I own there are difficulties in believing the earth is a globe, for instance the rates of curvature given in popular books are inconsistent and misleading. But I find it quite impossible to believe the earth is flat. I hope you will allow me space to say why. If the earth and sky were two great parallel wheels, with the north pole as a common centre, AS THE ZETETICS SAY, the southern stars would be near the rim of the revolving or sky wheel, and would all rush across the visible heavens of New Zealand together. (I say *rush* because, being near the rim, they would have much further to go than the stars we see, which are nearer the centre). Now they do *not* do as they should do according to the Zetetic theory. Leaving aside other evidence, I will quote Mr. Runciman. He is a Zetetic, but a candid one, he lives in New Plymouth, N.Z. He writes to me. "The Southern Cross never sets in N.Z.," and "if you look at Proctor's Star Atlas, map 12, and place a pin in the centre" where Proctor shows the south polar star) "and move the map round about, you have exactly in one revolution what occurs in our southern sky every 24 hours.

Now how can the earth possibly be flat when facts like these so pointedly contradict it? The sky is better evidence than small tracts of water.

Yours,

CALDWELL HARPUR.

[Our correspondent C.H. lies between two difficulties. He must choose the least. The earth is either flat or spherical. Can he suggest any other form? If a plane, the stars in the southern sky would hardly seem to "rush across the visible heavens," as he says, unless we were nearer to them than we are. An express train seems to creep along the mountains when seen at a distance. No doubt the stars move more rapidly in southern latitudes; for when the sun has 23 $\frac{1}{2}$ ° degrees south declination, we are informed by travellers in the south that he seems to set much more rapidly and more suddenly than he does in the north. In fact they have no twilight there. This is quite in harmony with the plane truth.

## SPECIAL NOTICE. THE PARALLAX COMPANY.

To the Readers of the Review.

Dear Friends,—It is proposed to form a Company whose object will be to purchase the plates, and issue a revised, and cheap edition of the work entitled, "Earth not a Globe," by our late esteemed friend "Parallax" (Dr. B. R.) The price of the shares will be placed at the lowest possible figure, so that every Plane Earth friend may participate in the re-production of the grandest and truest scientific literature, that was ever placed before the world.

Will those who are interested in the spread of Zetetic Astronomy as founded by Parallax, kindly communicate as soon as possible, (enclosing stamp for reply) with the Secretary.

Universal Zetetic Society.

32, Bank Side, London, S.E.

[N.B.—Permit me dear friends to take this opportunity of asking for your support in our contention for the truth of Zetetic Astronomy. Membership is placed at Six Shillings; Associates at Two Shillings and Sixpence per year. Members and Associates will receive a free copy of every publication issued by the society. Full particulars can be obtained from the Secretary, by enclosing a stamp for reply. J. WILLIAMS.

Respecting the *Southern Cross*, we want direct evidence, not hearsay evidence, of those competent to observe and competent to describe their observations in clear language. See Carpenter's article "How is it?" We do not acknowledge the evidence of a "Star Atlas," not even by Proctor, who declined to debate with Parrallax. When the planets, and the sun and moon, have great southern declination, they still revolve around the North Centre. Why should not the southern stars do likewise? At what "degree" of south declination do they turn off in another direction? But even if all the southern stars revolved in a direction different from that of the planets, what has the motion of the stars to do with the shape of the earth? No more than a revolving light in a lighthouse has to do with the shape of the rock on which it is built. We don't go up amongst the stars to find out the shape of the earth, no more than we gaze up at a gas chandelier to find out the nature of the floor of a public hall.

Water has been proved by *Parallax* to be really "level," in his great work *Earth not a Globe*. Therefore the Earth is a plane. If our correspondent thinks he can overthrow Dr. Birley's proofs we invite him to try, Ed. E.R.

## "THE MYSTERY OF GRAVITATION."

To the Editor of *The Future*.

(REFUSED).

Sir,—In the National Review for January, 1892, there is an article by J. E. Gore, with the above title. The writer commences by saying, "The law of gravitation discovered by Sir Isaac Newton is believed by astronomers to rule with absolute sway throughout the length and breadth of the visible universe." . . . "Gravity acts in proportion to the mass, and inversely as the square of the distance. This is the *law* of its action. But the enquiring mind is tempted to ask, *How* does it act? What is the mysterious mechanism which produces gravitative action between two distant bodies unconnected by any material bond? We cannot from experience gain any explanation of action at a distance." After this confession Mr. Gore proceeds to give or quote a number of hypotheses, or "scientific" guesses, as to how bodies can act at a distance while "unconnected by any material bond." He does not go



to the root of the matter and question the existence of this mysterious something called "gravitation"; he only proceeds to enquire *how* it may possibly act upon the most distant planet, comets, meteors, and revolving double stars?

Now, Sir, would it not be more scientific first to prove the existence of such a force, before proceeding to enquire how it acts? I think so. But as the writer speaks of "Newton's discovery of universal gravitation" he perhaps thought this enquiry was unnecessary. But before enquiring, for instance, *how* the sun manages to pull at the moon, or *how* the moon pulls at the earth—without any connecting rope or chain—I should like to know how and when Newton "discovered" that such action does take place at all? Can any reader enlighten me on this point? As far as my reading goes, at present, it seems to me that Sir Isaac Newton *invented* the idea of "universal gravitation" rather than discovered such a force; and that he invented it because it was necessary to his mathematical device of a revolving and rotating earth and sea globe. This is a very important question. Was "universal gravitation" a real discovery, or was it a mere "scientific" idea and invention? I affirm it was the latter; and I deny that the idea of solar or stellar gravitation has any true basis in the facts of nature. I shall appeal to the article in question in support of my contention, which article was written by a Newtonian.

First, I ask, why is there so much "mystery" surrounding this doctrine of gravitation? In his *History of Physical Astronomy* Professor Grant says; "Whether gravitation is a quality inherent in, and necessarily coexistent with, matter, or whether it is a principle essentially distinct from it, and operating merely on its constituent parts, is a question which, in all probability, is destined for ever to prove irresolvable to the most penetrating inquiries of the human mind." That is, to put the question in plain words, Does "matter" itself attract? or is there something else distinct from matter which does all the pulling? The learned Professor says that he does not know; and that "in all probability" no one ever will know! What is this but a veiled confession that the astronomers themselves know nothing at all about it? That it is all philosophical hypothesis or scientific guesswork.

In a letter to Dr. Bentley, dated February 25, 1692-3, or about ten years after his supposed "discovery," Newton makes the following confession;—"That gravity should be innate, inherent or essential in matter, so that one body may act upon another *at a distance*, through a vacuum, without the mediation of anything else, by and through which their action and force may be conveyed from one to the other, is to me SO GREAT AN ABSURDITY, that I believe no man who has in philosophical matters a competent faculty of thinking, can ever fall into it.

Gravity must be caused by an agent acting constantly according to certain laws; but whether this agent be material or immaterial, I have left to the consideration of my readers." This is very kind of Newton, and very flattering to the penetration of his readers! He leaves it for them to decide; and they now appeal to him! I agree with him, however, in saying it is an "absurdity" to believe that bodies can act at a distance—and such distances!—and that they can pull one another about like the great "globes" of the universe are said to do; and this too without any chains or couplings! Yet at another time Newton seems to fall into this very absurdity.

Newton says (*Optics*, b. iii. app. query 31); "Have not the small particles of bodies certain powers, virtues, or forces, by which they *act at a distance*? What I call 'attraction' *may* be performed by impulse, or by some other means UNKNOWN to me." On which the above mentioned writer very properly remarks; "This passage clearly shows that even Newton's penetrating intellect was unable to frame a satisfactory *theory* of gravitative action." Then why, I ask, believe in such an absurd and occult property? Newton confesses the idea to be an "absurdity"; yet he is compelled to adopt that absurdity himself, or to confess that gravity acts by some means "unknown" to him. Another time he supposes this secret force to be a "universal repulsion," which of course is the very opposite of "universal gravitation," or attraction. But as Taylor remarks, "This ingenious scheme of *universal* repulsion leaves no room for that self-repulsion of matter exhibited in the phenomena of elasticity"; and, as Mr. Gore reminds us, these "phenomena have indeed proved insurmountable difficulties in all kinetic *theories* of gravitation." This confession is honest.

Thus the best Astronomers are all at sea respecting gravitation; and they are each propounding theories respecting it which are mutually contradictory and destructive. Yet this baseless idea of gravitation, acting on all bodies, and in all conceivable directions and distances, is a fundamental doctrine lying at the very basis of the teachings of Modern Astronomy. It is one of its main pillars, if not its chief support. Without solar gravitation the "globe" ere this would have flown off at a tangent into "space," and would probably before now have collided with some "other world than ours"; and we should have been suffering, or consigned to, a worse fate than that with which we were threatened last November owing to a predicted "collision between the earth and a comet"! See *The Earth Review* for January. However, as we have fortunately survived this catastrophe, I would modestly ask any of our learned scientists to try to explain for your readers, how the sun can possibly "pull" at the earth at the distance, we are told, of ninety two, or ninety three millions of miles? What is

the connecting rod or coupling between the two bodies? What chain exists between them? of what are its links composed? and where is it attached? Is the force incessant, and if so what keeps it up? Does the sun exhibit any loss of energy or force for such tremendous and constant dynamic expenditure? Does the force come out from the sun to the earth, or *vice versa*; and if so, why does it *turn back* suddenly on reaching that or any other body? These are practical questions. No locomotive that we know of can drag the railway carriages after it unless they are first carefully coupled on to it, and by some extraneous power. Why should the sun or moon be able to "pull" at the "globe" with all its weight of mountains, seas, and continents, "unconnected by any material bond"? Such an action has never been known to take place on the earth. Then what reason is there for *supposing* it takes place in the sky? The idea is unreasonable, contrary to universal experience, and as Newton was obliged to confess, philosophically absurd. Yea, it is so great an "absurdity" that he says; I believe no man, who has in philosophical matters a competent faculty of *thinking*, can ever fall into it." Now, Sir, I believe the same; and I am delighted to be in harmony with so great an authority as Sir Isaac Newton on this point. But for the present I must conclude.

Yours faithfully,

ZETETES.

December 28th, 1892.

## THE SHAPE OF THE EARTH.

To the Editor of "The Future."

(ALSO "DECLINED.")

Sir,—The letter of "Enquirer" in the January issue of *The Future* is as good an example of a bit of special pleading as I have lately met with. He calls himself an "Enquirer," but his correspondence reveals the fact that he is much more anxious to prove that "the earth is a globe" than to find out the true shape of the earth. However, I will with your permission briefly notice a few of his points.

He owns that appearances at least are in our favour. He writes; "Parallax also *said*, 'Water is level.' This is seemingly true, but not an absolute truth." Now, Sir, it is well known that Parallax spent days, and weeks, and months not in merely "saying" but in proving experimentally that *water is level*; while "Enquirer," though admitting that this is "seemingly true," merely *says* this is "not an absolute truth." Now let "Enquirer" *prove* his assertion, and the victory will be his. He might also at the same time explain the difference between *ruth* and what he is pleased to call "absolute truth."

Enquirer further *says*, "That water appears level is due to the compensating effects of refraction." He gives no experimental proof of this: he only affirms it on his own authority. Besides, if water "appears level," as undoubtedly it does, I should like to know why we must think it convex? I should like to know too what refraction would take place in looking through a medium of unvarying density, as the atmosphere for instance at a uniform height above the level of the water? "Parallax" was careful to test the density of the atmosphere during some of his experiments; so that an "instructed person" *can* "deny or doubt" the assertion of "Enquirer." In fact, Sir, it is the "instructed" person who is best able to do so. It is the uninstructed person who swallows down all modern astronomical theories.

Again, "Enquirer" admits that, "Were the earth a plane the horizon at sea would seem to arise about us like the sides of a bowl, just as in fact our horizon does." This, doubtless, is true; and it is a source of satisfaction to Zetetics, or real Enquirers into the truths of Nature, to find that natural appearances are always in our favour, and in favour of the truth that the earth and sea form an outstretched plane. Nature is no deceiver. She lies not like the following unsupported assertion; "It (water) is declared to be *level*—all the same, it *lies* around the spheric surface of the earth, just as the oceans do." Yes, friend, "just as the oceans do." No more! "The spheric surface of the earth." This is a fine example of the old *Petitio Principii*, a tacit assuming, or begging of the very question at issue! I would advise "Enquirer" to take a few lessons in logic before he again appears in print, on this subject at least.

We have the same complaint to make with respect to the vague and illogical argument which he advances to prove that the "degrees" of longitude converge south of the equator. He innocently yet frequently uses terms which quietly assume the question at issue; namely, that the earth *is* a globe. He talks of the "latitude" of places north and south of the equator; and assumes that these latitudes and "degrees" though calculated and given to us on the *hypothesis* that the earth is a sphere, represent actual facts. He refers to "Great circle" sailing; and "*ventures to state*," on this supposition, what the distances are he wishes us to compare. This may be all very satisfactory—to himself, and to others who wish to prove a foregone conclusion; but it is not so to true Enquirers. He compares two sailing routes or distances, one running generally from north to south, and the other running from west to east; instead of taking two parallel circles, or arcs, both running east and west, but one north and the other south of the equator. He "*ventures to assert*" that the distance from Teneriffe to the Cape is 5,000 miles; and that from the Cape to Hobart Town,

6,100 miles or less ; and, without knowing how long the Royal Mail Steamers to New Zealand actually stop at these places he "ventures" further to say, "I feel assured that enquiries properly made at the offices of these great companies, as to how it happens that they only allot nineteen days for a run which is *twice as long as* another for which they allot fifteen days, would be lucidly replied to." This sentence certainly needs some elucidating, whether our friend "Enquirer" has made *his* enquiries "properly" or not, at the offices in 34, Leadenhall Street, London, E.C. He probably refers to what he thinks the distance ought to be "on the flat earth theory"; for one would think that twice 5,000 miles would be 10,000 miles.

Yet our critic, in the face of all these assumptions and ambiguities, suavely affirms that "this is all practical and clear!" It almost seems a pity to disabuse his mind of this pleasant hallucination ; but the truth demands it, and in all fairness to us, Sir, I hope that you will allow it. You profess to want "facts," so do we. Yes, Sir ; we want something more definite and more lucid than "Enquirer" gives us. We want facts, not guesses. "Enquirer" himself seems rather doubtful of his "facts," for he says ; "If the facts I have given you are substantially correct" (as if *facts* could be anything else !) it is certain that the earth is not a plane, and that water is not level."

Yes, yes, friend, "if" your figures were facts ; and "if" water was not level but convex, then the earth would be a globe ! "If" !! Now let "Enquirer" clear his premises of assumptions ; let proper enquiries be instituted, and let those enquiries, as he says, be "properly made" ; then let the argument be restated, this time "lucidly" ; and "if" he can prove that the degrees do converge south of the equator, or that water *is* convex at its surface and not "level," *then* we will own that appearances have deceived us, that Nature has played us false, and that the earth after all is *not* a motionless plane, but a mighty mass of globular land and water, rolling its prodigious weight on nowhere, in what is called "the plane of its orbit," and supported in that plane by a mysterious and invisible arm, outstretched from the sun, ninety three millions of miles long, and facetiously called "Gravitation" !

I am, Sir, yours faithfully,

"ZETETES."

January 17th, 1893.

"Standing order 14 House of Commons, denies convexity. There is no allowance to be made for it. None in making the Suez Canal, 80 miles long. None in making the Canal in China, 700 miles long. None in making the Manchester Ship Canal ; working from a level datum line no allowance is required at all."

I. SMITH.

## CUTTINGS AND REMARKS.

### The "Crust of the Globe" ! or The way they cook "Science."

#### "A GEOLOGICAL BLUNDER."

"There is in *Nature* an article by a French writer on Sir Archibald Geikie, Director-General of the Geological Survey, which is just now causing a good deal of talk amongst English men of science. Of course nobody is surprised at the fulsomeness of M. de Lapparent's eulogy. As *Nature* seems to exist for pushing the great official scientific syndicate of Huxley, Hooker, Geikie and Co., Limited—very strictly limited—which may be said to "run" science in England, M. de Lapparent would probably not have been *permitted* to write anything about a member of it unless it was fulsome. What has really amazed people is the audacity with which a famous historic blunder on the part of the Geological Survey is glossed over, and the Director General not only credited with the work of those who exposed and corrected it, to his utter discomfiture, but actually covered with laurels for thus winning one of the most glorious scientific conquests of the century. The whole thing is delightfully characteristic of State-endowed science in England. If you are one of the official syndicate who "run" it, you may blunder with impunity and make your country ridiculous at the taxpayers' expense. Scientific men who can correct you shrink from the task. They know that the syndicate can *boycott* them, and by *intrigue* keep them out of every honour and profit, and that the syndicate's satellites can write and *shout down* everywhere independent non-official critics. They also know that if, perchance, some particular intrepid person does succeed in exposing one of this syndicate, they can always, by the same means—after the public has forgotten the incident—surpress him, and boldly appropriate to themselves the credit of his work.

The geological secret of the Highlands, while the unlocking of which Sir Archibald Geikie is now credited, was really made a puzzle for more than half a century by the blundering of the Geographical Survey and director—General Sir Roderick Murchison—and famous courtier and "society" geologist of the last generation. In the Highlands he saw gneisses and ordinary crystal-line schists resting on Silurian strata, and he foolishly held the sequence to be quite normal. The schists, he would have it, were not archaic formations, but only meta-morphosed Silurian deposits. He also held that primitive gneiss was not part of the molten *crust of the globe*, but only sediments of sand and mud altered by intense pressure and heat. Murchinson, not to put too fine a point on it, "bounced" everybody into accepting this absurd theory, and the whole forces of the Geological Survey, with its official and social influence, together with the unscrupulous power of the official syndicate which then, as now, *jobbed* science wherever it had a State endowment, were spent in perpetuating the blunder and blasting the scientific reputation of whoever scoffed at it. But in the Natural History School of Aberdeen University it *was* scoffed at. The late Dr. Nichol, Professor of Natural History in Aberdeen, proved that Murchison and the Survey were *wholly wrong*, his proof being as complete as the existing state of science allowed. When he died, Dr. Alleyne Nicholson, took the same side, and for years in relation to this grand problem it was Aberdeen University against

the world. . . . In shouting the last word no voice has been louder than Sir Archibald Geikie's. It is therefore diverting to find his official biographer stating in *Nature* that all the time he was wrestling *in foro conscientie* with doubts as to the soundness of the official position, and that finally "his love of truth" prompted him to order a re-survey of the whole Highland region. In plain English, the taxpayer having had to pay for Murchison's bungling survey, was because of his successor's love of truth," to enjoy the luxury of paying over again to correct it.

The real truth, however, is this:—When it was supposed that the Aberdonians were finally crushed, there arose in England a young geologist called Lapworth, who had the courage to revise the whole controversy and take sides with the Aberdeen school. As he developed an extraordinary genius for stratigraphy he not only broke to pieces the official work of the Geological Survey in the Highlands, but by revealing the true secret of the structure of that perplexing region, he played havoc with the Murchisons and the Geikies and all their satellites, convicting them of *bungling* and covering them with ridicule.

Nature, in fact, in these parts had suffered from a much more powerful emetic than Murchison imagined, and when bits of the primitive crust of the *GLOBE\** were thrown up and pushed on the top of more recent deposits Murchison *jumped to the conclusion* that they were of later date than what they lay on. It was a *terrible blunder*, as the Aberdeen men persistently held, and we do not wonder that Sir Archibald Geikie, who rose to place and power by defending it, is anxious to have his connection with it *veiled* by a friendly hand. But it is rather outrageous for the friendly hand to give him the credit of conceding the very *error* which he *defended to the last gasp*, and deprive Professor Lapworth of the honour of having banished it from science. One of the most diverting things, however, in the Article in *Nature* is that Sir Archibald Geikie is belauded because, when frightened by the stir Professor Lapworth's paper made in 1883, he was fain to send his surveyors to go over the Highlands again—he, as their official chief, ordered them "to divest themselves of any *prepossession in favour of published views*, and to map out the actual facts." Old Colin Campbell, when he objected to the institution of the Victoria Cross, said it was as absurd to decorate a soldier for being brave as a woman for being virtuous. He did not foresee a still greater absurdity—that of eulogising a man of science because he instructed his assistants to tell the truth when conducting an investigation into his own blunders." (*Italics ours*).—From the *Daily Chronicle*, Saturday, Jan. 14th, 1893.

\*In the above article we have "Science" exposing "Science"? Is not this idea of "the crust of the Globe" the greatest blunder of all and the basis of all the other geological "blunders"? (ED. E.R.)

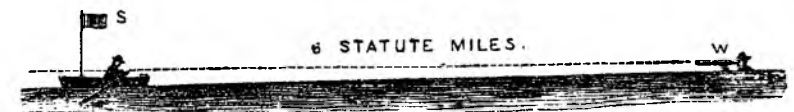
### IS WATER HORIZONTAL ?

"Parallax" the modern and experimental discoverer of the true shape of the earth and sea is dead, but his living testimony was, Water is horizontal. John Hampden Esqr. who nobly defended the truth, is also dead, but his living testimony was, Water is horizontal. William Carpenter, another noble defender of the truth; whose One Hundred Proofs that the World is not a Globe, has forced the astronomers into a dogged silence, says "Whenever experiments have been tried on the

surface of standing water, this surface has always been found to be level," i.e. horizontal. The Zetetic Society lives, and its united un-deviating testimony is, Water is horizontal. Is this testimony true, or is it false? Let practical witnesses give their testimony, and I defy any official Astronomer to contradict them by an open and direct appeal to the surface of Water, either on lake, river, or sea, in any part of the World.

First. "Parallax" says, "Experiments made upon the sea have been objected to on account of its constantly—changing attitude. Standing water has therefore been selected, and the following experiment made."

"In the County of Cambridge there is an artificial river or canal, called the 'Old Bedford.' It is upwards of twenty miles in length, and passes in a straight line through that part of the fens called the 'Bedford Level' The water is nearly stationary, often entirely so, and throughout its entire length has no interruption from locks or water-gates; so that it is in every respect well adapted for ascertaining whether any and what amount of convexity really exists. A boat with a flag standing five feet above the water was directed to sail from a place called 'Welche's Dam' (a well known ferry passage), to another place called 'Welney Bridge.' These two points are six statute miles apart. The observer, with a good telescope, was standing in the water, with the eye not exceeding eight inches above the surface. The flag and the boat were *clearly visible throughout the whole distance!* as shown in the following diagram.



PROVING WATER TO BE LEVEL.

"From this experiment it was concluded that the *water does not decline from the line of sight!* As the altitude of the eye of the observer was 8 ins., the highest point, or the horizon, or summit of the arc, would be at one mile from the place of observation; from which point the surface of the water would curvate downwards, and at the end of the remaining five miles would be 16 feet 8 inches *below the horizon!* The top of the flag, being 5 feet high, would have sunk gradually out of sight, and at the end of six miles would have been 11 feet 8 inches *below the eye line!*" This simple experiment is all sufficient to demonstrate that the *surface of the water is parallel to the line of sight and is therefore Horizontal;* and that the earth cannot possibly be other than A PLANE!"

Second. Mr. W. T. Lynn of the Royal Observatory, Greenwich in his "First Principles of Natural Philosophy" says, "the upper surface of a fluid at rest is a horizontal plane. Because, if a part of the surface were higher than the rest (and on a globe one part must necessarily be higher than the rest!), those parts of the fluid which were under it would exert a greater pressure upon the surrounding parts than they receive from them, so that motion would take place amongst the particles and continue until there were none at a higher level than the rest, that is, until the upper surface of *the whole mass of fluid became a horizontal plane.*"

Third. Professor Airy in his "Six Lectures on Astronomy" says, "quicksilver is perfectly fluid, its surface is perfectly horizontal."

JNO. WILLIAMS.

(To be continued).

#### SOUTH LATITUDES.

"It is a well ascertained fact that the constant sunlight of the North develops, with the utmost rapidity, numerous forms of vegetable life, and furnishes subsistence for millions of living creatures. But in the South where the sunlight never dwells, or lingers about a central region, but rapidly sweeps over sea and land to complete in 24 hours the great circle of the Southern circumference, it has not time to excite and stimulate the surface, and therefore even in comparatively low Southern latitudes everything wears an aspect of desolation.--*Parallax* in "Earth not a Globe."

The bones of musk oxen killed by Esquimaux were found North of the 79th parallel, while in the South, man is not found above the 56th parallel of latitude. Polar Explanations.—Read before the Royal Dublin Society.

#### A SONG.

We do not foist a paste-board Globe on every British school,  
Nor vote for children's brains to rack with *Theory's* tangled rule;  
Nor Teach foul Falsehood's right to reign though donned in wig and robe,  
Nor quench astonishment in youth when told the earth's a Globe!

Raise high the Truth; knock down the lie! and blow a mighty blast;  
By showing how for so-called Science the Lie rose in the past;  
Proclaim the thousands driven mad, and others nigh entranced,  
Through grinding-in the Globe-man's Lie, and Protoplasm's dance.

Record how "Parallax" once fought, and Hampden's Clarion tongue;  
Tell how "Zetetes," Carpenter, have borne the Standard on:  
Of other heroes, young and old, in every land and clime;  
And let the Truth which *must* be told resound along the line.

On, onward! Flatten all the globes in every British school,  
Nor keep the Right upon the rack while Falsehoods proudly rule;  
Let honest Truth, not lies, prevail through England's fair domain  
Then Right shall rule and Truth shine o'er the World's extended Plane.

ICONOCLAST.

# THE EARTH - NOT A GLOBE - REVIEW,

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136: 6.

NO. 3.

JULY, 1893.

PRICE 2D.

#### SPOILED CHRISTIANS.

[Being the substance of a Sermon preached by the Editor in Monk's Road Chapel, Lincoln, Sunday morning, May 14th, 1893].

"Beware lest any man spoil you through philosophy and vain deceit, after the tradition of men, after the rudiments of the world, and not after Christ." Col. 2: 8.

We have, in the words of the text, a note of warning addressed to Christians. It will not be denied that Christians need preaching to sometimes as well as the world. Paul's letters, exhortations, and warnings, were addressed to believers. A faithful minister has need at times to preach something more than what is commonly and superficially called "the gospel." He is commanded to "preach the Word," and the Word of God refers to a great many subjects, some of which are sadly neglected, as for instance the subject of Creation. Yet this subject of Creation stands out at the forefront of the Holy Scriptures, which Scriptures were written for our learning. But many in our days, and, alas! many professed Christians, prefer to take their learning regarding the construction of God's Universe from other sources rather than from the revelation which the Creator has given us. In fact they prefer human philosophy and vain deceits with the traditions of men rather than the statements of the inspired prophets and apostles. If a "scientist," with half a dozen letters of the alphabet tacked on to his name, should come down to lecture on the stars, or the Universe, he is listened to by multitudes with open ears, and mouths; and his words are considered far more reliable than those of the holy men of God who spake and who wrote as they were moved by the Holy Spirit. We do not disparage learning or true science; but there is a great deal abroad now which as Paul says, is only "Science, *falsely* so-called." 1 Tim. 6: 20. That is, this so-called "science" is not true knowledge, or the

knowledge of truths, or facts, found in nature or the universe; but it is merely speculative learning, deceptive philosophy and worldly tradition. Now these traditions, these worldly philosophies, make the Word of God of none effect, as the Saviour said. Mark 7 : 13. So that when God speaks to us on the same subject we either deny His Word, or take it in an unnatural sense to accomodate it to the teachings of men, and so it becomes of none effect to us. Hence the need of this word of warning, "Beware;" that is

BEWARE OF PHILOSOPHY.

Beware of Science that is falsely so-called. There are those who think this word of warning is not needed, and who do not like philosophic subjects referred to in a sermon. But while we ought not to preach philosophic sermons, which, alas! is becoming a common practice; yet, if the Spirit of God inspired Paul's statement, we ought to lift up a voice of warning *against* human philosophies, and show how they are undermining faith in the teachings of the gospel. I propose therefore to do so this morning in connection with the question of Creation and the shape of the Earth, in which you know I am so much interested. I am interested because I see how by false views of Creation and false theories of the Universe, our great spiritual enemy is subverting the faith once delivered to the saints. You who are here know how human traditions have nullified much of God's Word, especially the great truth of Life through Christ alone; and I am thankful to think that God has raised up men in Lincoln to proclaim to the ends of the earth the primitive and gospel Hope of Eternal Life. But if subtle philosophies and a false science are allowed to undermine all faith in the Sacred Writings it will soon be useless to preach to perishing men the gospel of a new and better Life through Israel's Coming Messiah. When men, through a false "Science" have lost faith in the Bible then those who now ask what the shape of the earth has to do with Salvation, will find it has something to do with damnation if not with salvation; for men will be damned, or condemned, through unbelief. And it is most remarkable that a false system of Cosmogony is at the basis of nearly every form of heresy and unbelief.

I therefore feel it my duty this morning to warn you; for although you may think your own faith is at present firm, that of others is actually giving way, as I shall proceed to shew, and I trust that some of the young men I am now addressing will yet be raised up, not only to preach the Gospel of Resurrectional Life through Christ, but also be enabled to defend the integrity and soundness of the Holy Scriptures on this great Creation subject. For if the foundations be destroyed what will the righteous do? It is not by accident that God has placed the subject of Creation in the forefront of His Revelation. He

challenges our allegiance as Creator. But if the first chapters of Genesis are wrong, and the earth is a whirling Globe, evolved out of a hot cinder thrown from the sun; and if, *as a part of this evolutionary scheme*, we have sprung from "Bathybius"—a jelly-fish kind of slimy mud—ascideans, mammals and monkeys, then the gospel of Jesus Christ is a useless superfluity. If all around us on this so-called "planet" is unlimited "space," and if there be no heaven near and above us, then the resurrection and the ascension of Christ are myths, or allegories, to be explained away, as they are being explained away, by clever "Christian" sophists in harmony with the new astronomical philosophy.

"WHERE IS HEAVEN?"

To shew you that I am not drawing a fanciful picture I will quote from a sermon published in *The Christian World Pulpit*, March 29th, 1893. It is by the "Rev." Geo. St. Clair, F.G.S., preached in West Grove Church, Cardiff. It is headed, "Where is Heaven?" and the text quoted was;—"As they were looking He was taken up, and a cloud received Him out of their sight." Acts 1 : 9. You would hardly expect to find a man denying that heaven is a locality placed above us in the face of such a text. But it is not the first time such a text has been craftily handled and finally contradicted by those who wrest the Scriptures to their own destruction. And on what basis is Christ's Ascension to a local heaven denied by this professed man of God? The new Cosmogony. The earth is supposed to be a globe, surrounded by—"space"—so if there is no local heaven the term "heaven" refers to a "state" of feeling, or a condition of being, not to a place at all! The preacher says:—

"In 1492 Columbus sailed Westward in search of the East Indies, and thirty years later Magellan actually sailed away from Europe in one direction and returned in the other, having voyaged all round the world. It was thus shewn that the earth is a globe. Previously the common notion had been that the earth was flat, and heaven a little way above the clouds, and the place of the dead—the wicked dead, if not all the dead—somewhere underneath. These were ancient ideas and the fact that we find them in the Bible is one proof that the Bible is an ancient book. The Bible writers had been educated to believe that God had laid foundations for the earth, or supported it on pillars. Heaven was His throne, the earth His footstool. If the earth opened you might go down alive into the pit or abyss, like Korah, Dathan, and Abiram. In New Testament times these ideas were still traditionally current, and when the Apostle Paul declares that in the name of Jesus every knee shall bow, of those in heaven, those on the earth, and those under the earth, he intended it as an enumeration of all the provinces of the Universe."

The above paragraph clearly shews what the Bible writers had been "educated to believe," both in old Testament and in New Testament times. But this "Rev." Fellow of the Geographical Society says; "The

progress of knowledge leads us to look *differently* at some of these questions." This is a polite way of saying that Bible writers were all wrong. How do we know that they were wrong? Because Magellan sailed round the world, and "*thus* it was shown that the earth is a globe." And this is called "the progress of knowledge." Knowledge indeed! I am not going to give you a Science address this morning—I shall be happy to do this, God willing, another time—I am going now to keep strictly to the Bible aspect of the subject, so I will dismiss this specimen of scientific progress by saying that such "knowledge" would enable you to prove any island, say Australia, to be a globe, if you could only sail round it! This would be further "progress" of the same kind! But what I want you to notice here is this, the idea that we are living on a sort of shooting star, or planet, is made the basis, not only of denying the existence of heaven as a locality, but, as a result, also denying one of the fundamental articles of the Christian faith; namely,

#### THE ASCENSION OF JESUS CHRIST.

Of course this is consistent. Remove heaven millions upon millions of miles away, or deny its existence altogether; then it logically follows that the resurrected body of our ever blessed Redeemer did not "ascend" there; and according to this, he does not now sit at the right-hand of the MAJESTY ON HIGH to make intercession for us. In fact it is more than suggested by this writer that the material body of Jesus never rose again; so that the Apostle Thomas was deceived and the other apostles. And if Christ be not raised from the dead, we are yet in our sins; then they also who have fallen asleep in Christ are perished; and we, like the deluded apostles, are of all men most to be pitied. 1 Cor. 15: 14-18. But thanks be to God, in the face of all the evidence for the bodily resurrection and ascension of the crucified Nazarene, we can say with the gifted Paul; "But now is Christ risen from the dead, and become the first fruits of them that sleep"; and not only so, but that "He ascended up on High," and led forth a multitude of captives. See Eph. 4: 8. margin. But I want you to see where these false philosophies are leading men to. To covert and open denial of the leading facts and doctrines of the Christian religion. You ought to know these things. I shall not weary you with quotations, or I might instance other writers besides, but I must give one or two extracts from the sermon already quoted to convince you of the dangers incurred in harbouring a false system of Creation, or Cosmogony. The preacher went on to say;—

"Heaven will extend all round the globe in every direction. If we found reason to fix heaven, or God's throne, in some special locality, such as the Sun, or the larger luminary around which our Sun is supposed to revolve, we could not say that heaven is above our heads, because the Sun is never in the zenith to people outside the tropics, and because the earth rotates daily, so that what is above our heads at midnight is beneath our feet at noonday. . . . Similar

considerations apply to the supposed central Sun in the Pleiades; and even if we could get there we should perhaps find that the great luminary in the Pleiades was moving round a Sun more masterful and huge in an altogether different region of the heavens. We cannot find the centre of the universe, and we do not know whether it has one."

This is a sad confession to make on the part of a man and a minister who professes to be a Christian. It reminds one of Mary's complaint; "They have taken away my Lord and I know not where they have laid him." It is the hopeless wail of "Science" without the historic facts and hope of Redemption.\*

But I must read another extract from our "Christian" scientist and preacher to show how he further tries to steal away all our tangible hopes and supplant them with vague and so-called "spiritual" immaterialities. He goes on to say in his sermon;—

"Nor is the question of distance at all ridiculous, if we are going to look at the matter in this material way. Dr. Thain Davison has suggested (*The Quiver* for January) that the pivot of the starry universe (supposed to be in the Pleiades but if in the constellation of Hercules no matter) is the peculiar residence of Jehovah, the metropolis of creation, the palace of the King of kings. Upon this a newspaper writer remarks that Sirius (a star which is really really nearer than the Pleiades is so immensely distant that a traveller proceeding 2,000 miles a day would be 150,000,000 years in getting there, and Adam and Eve would not yet be very far on the way."

So that on the basis of absurd star distances, calculated by modern astronomers upon a fanciful parallax, we are asked to give up the ancient apostolic ideas of heaven; and to believe that the apostles and the prophets with all the worthies of old had mistaken notions thereon. Yea, more; we are required to give up our hope of the resurrection of the body, based as it is upon the Resurrection and Ascension of the glorified body of Jesus the Christ. And we are invited to do this too at the bidding of a gentlemen who dares to take for his text, "As they were looking He was taken up, and a cloud received him out of their sight." Acts 1: 9. Could sacrilege go further? Yet in the face of all the evidence to the contrary he affirms concerning Christ's material resurrection body, "He did not take it to heaven with Him." Then we enquire, What became of it? Was even the sceptical Thomas imposed upon after all? But the reason this "Fellow" gives is one quite apart from the evidences for the resurrection. We are told that "a material body cannot throw off the influence of gravitation and leave the earth." You see historic evidence of facts must be laid aside to give way to modern astronomical assumptions; and no assumption is more baseless than the modern idea of universal gravitation, as I have shewn elsewhere.

\* See also the following article headed, "The Hopeless Wail of Science."



Whether therefore you now see it or not, I firmly believe that a general apostacy from the truth is ripening, based upon the unfounded assumptions of "Science"; and that therefore, there is

DANGER AHEAD!

Before I conclude I would warn you, friends, of the great danger which crosses our path here. Professors of science who profess also to be Christians place more confidence in their so-called "science" than they do in the Word of God. They wrest the Scriptures, under the plea of spiritualizing them, to make them suit their scientific, or unscientific, theories. For instance, in the sermon quoted, in answer to the question, What became of Christ's body? we read;—"This difficulty is met by the *supposition* that it was not the physical body of Jesus which rose from the dead, no more than it was the fleshly body that ascended; but that the whole range of these after death appearances of the Lord belong to the spirit world." These modern scientists, whether christian or infidel, seem as anxious to get rid of the physical body of Christ as the scribes and pharisees of old. Why? Because, say they, heaven is not a place, but only a state of feeling; and a body requires locality. And there is now no heaven shining above us, it is all empty and endless "space." Hence this false prophet says; "When once we have laid the body down we have done with it." Thus the Resurrectional hope as well as belief in the Ascension of Christ is undermined.

Friends, we are evidently living in the "perilous times" predicted by the apostle Paul; and there are many traitors already in the Christian camp. "Beware"! The great apostle Paul bids you "Beware." If you lose faith in the heavenly and well attested verities which lie at the foundation of our hope you will lose Eternal Life; and if you think that your own faith is firm yet come to the rescue of others by helping us to remove the stumbling blocks out of their way. You may save yourselves as well as your children. A man last week was walking down the line in or near the station at Leicester. He doubtless thought he was safe. He knew the line well, and was, I believe, a worker on the railway. But his back was towards an approaching engine. There was no one near to warn him; no friendly sign admonishing him to "Beware of the trains"; and so the engine rapidly overtook him and killed him on the spot. A single cry would have saved him. May the apostolic warning save us. And when we see our friends liable to be led away with a baseless science, a science such as the apostle Paul speaks of which is "falsely so called," then let us take heed and re-echo the inspired warning which God Himself has given us through his faithful servant. It is

"Beware lest any man spoil you through philosophy and vain deceit, after the tradition of men, after the rudiments of the world, and not after Christ."

### THE HOPELESS WAIL OF SCIENCE.

As going to press we are also reminded of M. Zola's hopeless wail of Science, as recorded in the Westminster Gazette of May the 20th, 1893. The Editor remarks;—"In proportion as science advances, it is certain that the ideal slips away." So spoke M. Zola last night at the Paris Association of Students, curiously following up Professor Huxley's Romanes lecture, and that tendency to "round upon progress" which we spoke of yesterday. He, too, is of opinion that science or evolution does not, for the moment, show the way to the land of promise." The editor then quotes M. Zola as saying;—

"Experiment, it is said, has done its work and science is incapable of re-peopleing the heaven that it has emptied, of restoring happiness to the souls whose artless tranquility it has ravished." But we are suffering only from the inevitable fatigue that attends long voyages. Distressed, we sit at the edge of the far-stretching plain of the opening century, and rather than take up the onward march into this unknown country, we would have preferred never even to have come so far, but to have died far back on our course beneath the stars. But science had ever promised truth; and yet how pitiful, how touching, the cry of those who have lost their illusions and know not where to look."

Yes! These men allow what they call "science" to spirit heaven away from them, and then like poor orphans they bewail their sad condition. They cannot say like the true Christian can say;—"Our Father who art in *Heaven*," because the idea of boundless "space" has spirited it away. M. Zola, however, tried to comfort himself with the fact that "Science had ever *promised* truth." It may have "promised" truth; but, like many besides who make large promises, it seldom fulfils those promises. We desire truth, and truth only, at whatever cost; and as many can testify, we have made some sacrifices to obtain truth, and the freedom to proclaim it. But we ought to be well assured that it is the truth we have, whether in Science or in Religion, lest we only part with one set of "illusions" for another. Hence the need of the apostolic injunction; "Prove all things: hold fast that which is good." Scientists have been "educated" in the globular theory from childhood; and we doubt if ever a man of them has honestly examined into the foundations of his belief. We have, and so we pity their forlorn condition; but we must, nevertheless, expose their unscientific and delusive assumptions, especially as they would rob us of a well-founded hope.



## THE MIDNIGHT SUN.—Continued.

### Proof that the Earth is not a Globe.

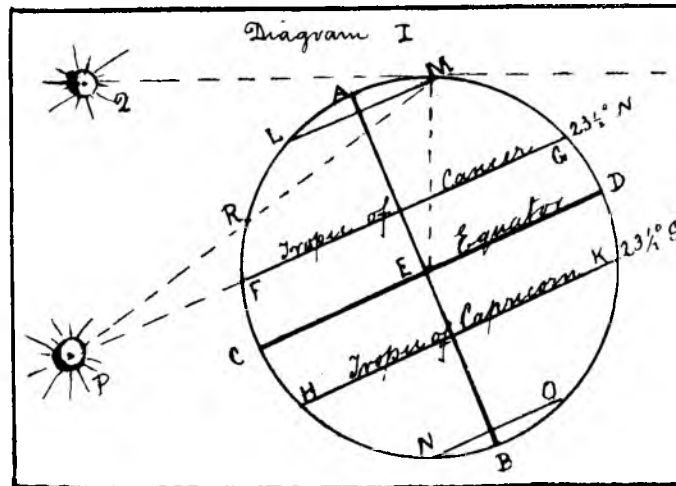
Having given the facts connected with this interesting enquiry, we now proceed to show how those facts utterly conflict with the globular theory, and how beautifully they harmonise with the plane-earth truth. To do this effectually we must have recourse to diagrams. As these increase the cost of printing we hope our friends will make it up by doing what they can to increase the circulation of our paper. We willingly give our services, but we cannot expect the printers to do so. We will now refer to diagram 1, which represents the sea-earth world according to the globular theory.

Let A C B D represent the "globe," rotating upon its "axis" A B. (see next page). The line C D will represent the circle of the equator midway between the "poles" A and B.

The line F G will shew the position of the tropic of Cancer said to be  $23\frac{1}{2}^{\circ}$  north of the equator, which is the highest north declination the sun attains on or about midsummer day, June 24th. Let P represent the position of the sun directly in a line with this tropic at this period. In this position it would be mid-day on the side of the earth next the sun along the meridian L F N; and it would be midnight on the opposite side along the meridian M D O.

Let L.M. represent the Arctic Circle said to be  $23\frac{1}{2}^{\circ}$  from the North "Pole" A, or about  $66\frac{1}{2}^{\circ}$  of north latitude; which latitude, or circle, runs across the northern parts of Norway and Sweden or Scandinavia.

THE EARTH AS A GLOBE.



Now we are credibly informed by travellers that in this latitude, and at or about the above mentioned date, a spectator at M can see the sun at midnight, above the horizon, looking directly over the north "pole" in the direction M Q. The horizon is a straight line tangential to the surface of the sphere at the point of observation, and it must therefore be placed at right angles to the dotted line E M running from the centre of the sphere to the latitude and position of the observer.

But we have already alluded to the fact that the sun is never seen directly over any part of the earth north of the tropic of Cancer; that is, the sun is never more than  $23\frac{1}{2}^{\circ}$  north of the equator. Persons living further north than this have always to look in a *southerly* direction for the sun at noon; and it ought therefore never to be seen to the *north* of them at any time, so we must place the sun in the diagram somewhere on the line P F G. Let it be placed at any point P. Now it is manifest that for an observer at M, near the latitude of Haparanda, to see the sun at midnight at P, over the tropic at Cancer, he would have to look *downwards* and be able to see right THROUGH THE "GLOBE" for about five or six thousand miles along the dotted line M R!! I am not aware of any traveller who claims this ability; nor yet that the "globe" to oblige the astronomers, becomes transparent at this period; I am not aware that any spectator of the phenomenon of the midnight-sun has to look *down* at all upon this gorgeous spectacle. The traveller sees it *above* his horizon, and the higher he ascends the higher the sun is seen. Therefore *the earth cannot be a globe*; and thus the midnight sun is a splendid and periodic witness to the fallacy of this absurd unscientific and infidel hypothesis.

### Further Assumptions needed.

We are well aware of the further assumptions the astronomers make to get over these difficulties; and we are quite prepared to meet them when occasion requires. They have first to remove the sun millions of miles from where we know and can see that he is; and then they have to assume that he is millions of times larger than he is. In fact assumptions vitiate their whole system. For the midnight sun to be seen, as it is, by a spectator at the point M looking directly over the north "pole," it would have to be placed somewhere on or above, the line M Q, say at Q. The further off the sun is placed from the "globe" and the greater divergence there would be between its proper place at Q, above the northern horizon, and its hypothetical position at P. If the spectator could look right through the earth and sea the sun ought to be found on the line G F P to satisfy the conditions of the globular theory; but as a matter of fact it is found many thousands (and according to astronomical ideas many millions) of miles north and away from where it *ought* to be. I fear that the sun has not yet been converted to the Newtonian way of

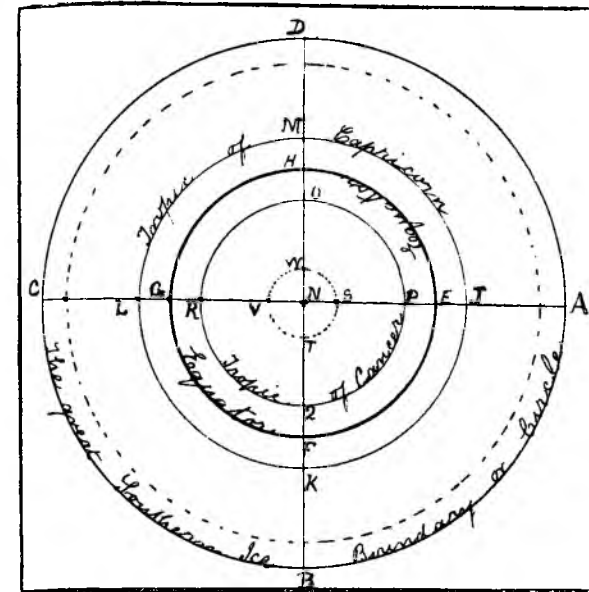
thinking or of acting. Its course of conduct is rather inconsistent with modern scientific "belief"—and there are philosophical creeds as well as religious "beliefs"—and it is very well known that the behaviour of the moon is even more outrageous, considered from an astronomical point of view. There may be some little excuse for the moon in her wayward wanderings, considering her changeable character and the sex generally applied to her; but surely the sun ought to keep his place better with respect to the "globe" than to go out at nights staring at travellers nearly at the "north pole." But perhaps, if they could only see it, he is staring with astonishment at some of their unphilosophical ideas; and if their "scientific" consciences be not utterly seared he must stare them out of all countenance with such ideas.

There must be something sadly wrong *somewhere*, for both luminaries regularly to shew their smiling faces in positions both when and where they ought never to be seen. How is it? Perhaps "gravitation" gets a bit slack at times, and kindly allows them these little excursions! However, we planists have no need to complain, although it rather frets the Astronomers. Why should the sun not visit the north pole, and make a considerable stay there too, for the benefit of Arctic explorers? But here is the strange part of the question, Why is he, *and why are they*, so partial to the *north* "pole"? Why not try the *south* sometimes in the same way? It seems rather strange: does it not? Very! How is it that vegetation, flowers, fruits, birds, animals, men, civilization, &c. cannot be found so far south as they can north? The Plane truth explains it. However we will now proceed to show how simply the phenomenon of the Midnight Sun can be explained in harmony with the truth that the earth is a vast outstretched and motionless plane with the sun circling above it in a spiral orbit around the North Centre.

### THE PLANE TRUTH.

The earth and sea together form a vast circular plane. The surface of standing water has been abundantly proved to be *level*. We cannot repeat the evidence here; but those who want it may find the evidence given in an excellent book by "Parallax" (Dr. Birley) which has never yet been answered. This book though out of print at present may be reprinted before long, or as soon as the necessary means are available. Oh! Is there no one with sufficient means, *and sufficient love of the truth*, to do himself so great an honour and the truth so great a service? (But see a letter in the April number of the "Earth Review.") However, to our subject. As water *is* level, the earth *must* be a plane.

THE EARTH AS A PLANE.



Let A B C D represent the great circular plane, with N for the north centre. The thicker circle E F G H will represent the equator or sun's daily path at the equinoxes in March and September, half way between the North Centre N, and the outer Southern ice circle A B C D. All countries in-

side the equatorial circle have North latitude; and all outside it South latitude. Let the outer and thinner circle J K L M represent the tropic of Capricorn, or the sun's expanded and daily path in our mid-winter, and the New Zealand mid-summer; and the inner and thinner circle P Q R O the tropic of Cancer, or the sun's contracted and more northerly path or circle at the time of our mid-summer and the southern mid-winter. The small dotted circle S T V W will show the position of the Arctic circle, and the larger dotted circle near the outer circumference, the Antarctic circle.

### "Degrees."

Now a glance at this diagram will reveal another very popular fallacy in connection with this subject. There cannot be ninety "degrees" of the ordinary geographical extent, between any point on the equator and the north centre. The number and the length of "degrees" of latitude north and south of the equator have been "calculated" on the *assumption* that the earth is a globe. But as the "level" of the surface of the sea proves the earth to be a plane these "degrees" are so far misleading. If we allow 360 degrees for the equatorial circle E F G H, there would be, in distance about  $114\frac{1}{2}$  of *such* "degrees" in its diameter say from E to G, or F to H; and only about  $57\frac{1}{4}$  of *such* "degrees" in its radius, or from the equator to the so-called "pole," or North Centre. So that if we take all the "degrees" as equal, in length the distance from any point G, on the equator, to the North

Centre, N, instead of being 6,250 miles, or one quarter of a meridional *circle* of 25,000 miles as the astronomers assume, it would really be only about 3980, or a little under 4,000 miles. We should have to subtract about one-third. But more about this "degree" delusion another time. See *Earth Review* for April, 1893.

### THE SUN'S SPIRAL PATH.

Now when the sun is on or over the equator, say at the point G, it is acknowledged that its light extends to the North Centre, at the point N. Therefore the distance G N represents the distance which the sun's rays can pierce through our atmosphere, in a *northerly or southerly* direction, so as to show the full body of the sun to an observer north or south. Hence when the sun is on the tropic of Capricorn in our mid-winter, say at the point L, its direct rays cannot be seen beyond the point V in the Arctic Circle V W S T. Hence all who live within the Arctic Circle at this season of the year are in darkness as far as the sun's direct rays are concerned, the distance L V being the same as the distance G N. But when the sun's daily circular path has contracted towards the north so as to bring that luminary to the point R in the tropic of Cancer at our midsummer, then it is evident his rays must shine right across the whole Arctic Circle from R to S, the distance again being the same as that from G to N.

#### A Plain Proof.

So that if the earth be a plane with the sun moving over it as already described, a spectator on or near the Arctic Circle at the point S ought to see the sun at midnight at the point R as he looks over and across the North Centre. But this is just what the spectator in such a position *does* see according to the abundant evidence already adduced. Therefore the earth is again clearly and abundantly **PROVED TO BE A PLANE**. In such a position on a plane the spectator although in a high northern latitude, must necessarily look still further *north* to see the sun at midnight as he circles round the North Centre; but on a globe, as we have already seen, where the body of the sun never attains more than  $23\frac{1}{2}^{\circ}$  north declination, a spectator in such a position,  $66\frac{1}{2}^{\circ}$  north latitude, would, (if he could see the sun at all) be compelled to look *downwards* through the "globe" and in a *southerly* direction. This cannot be done, and if it could the sun would not be found there; therefore again the earth is not a globe.

#### A Faithful Witness.

Thus the sun in his movements becomes a grand and solemn witness to the truth of God and a stationary and outstretched earth. As M. Chaillu, in spite of his astronomical education and bias, is constrained

honestly to confess that it seems to be the sun and not the earth which revolves. He says "It," the sun, "*seems to travel around in a circle*, requiring twenty-four hours for its completion." Hear, hear! And since by plane triangulation the sun can be proved to be a comparatively small small body and not more than three thousand miles away, we need not wonder at this. It is surprising how near the truth our Arctic explorer comes when, forgetting his astronomy, he simply and honestly describes the phenomena he witnessed. He further says;—"At the pole the observer seems to be in a **GRAND SPIRAL MOVEMENT OF THE SUN**, which further south takes place *north* of him." Well done M. Chaillu! We thank you for your honest and noble testimony. It agrees with that of the inspired Psalmist when he said; "The heavens declare the glory of God; and the firmament sheweth his handywork . . . In them hath He set a tabernacle for the sun which is as a bridegroom coming out of his chamber, and rejoiceth as a strong man TO RUN A RACE. *His* going forth is from the end of heaven and HIS CIRCUIT unto the ends of it, and there is nothing hid from the heat thereof." *Psa. 19: 1-6.*

Let us then, in conclusion, again unite with the Psalmist, in his song of Praise; "To Him that by his wisdom made the heavens; for His Mercy endureth for ever. To Him that **STRETCHED OUT** the earth *above the waters*; for His mercy endureth for ever. To Him who made *great lights*; for his Mercy endureth for ever. The sun to rule by day; for His Mercy endureth for ever. The moon and the stars (all "lights" only) to rule by night; for His Mercy endureth for ever." *Psa. 136: 5-9.*

"The sun may be seen at midnight in Hammerfest, in Norway, the most northerly town of Europe. It contains about 3,000 inhabitants, whose principal business has to do with the fisheries." *E. P. W.*

Considering the diameter of the sun is 888,646 miles, (?) the three thousand fishers must have plenty of room to move about in. I should imagine the sun-fish would require little cooking. For this valuable piece of absolutely original information about the sun, our little planet is indebted to **SIFTINGS**.—*Fearson's Weekly, Jan. 21st.*

*Extract from a letter written by a passenger on board the "Iberia," Orient Line, R.M.S.—At noon on Thursday, 27th of September, we were 169 miles from Port Said; by the ship's log, our rate of steaming was 324 miles in 24 hours. At 12 p.m. we were along side the lighthouse at Port Said, it having become visible at 7-30, when it was about 58 miles away. It is an ordinary tower, about as high as Springhead (60 feet) lit by electricity." According to modern science, the vessel would be 2,182 feet below the horizon.* *J. C. AKESTER.*

## THE GLORY OF GOD.

BY LADY BLOUNT.

The heavens declare the glory of God  
 And the firmament shows His power :  
 In their Maker, God, let the nations all trust,  
 As their shield, their strength and tower.  
 For he speaks to man in Nature ;  
 And the stars write out His Word.  
 Day unto day  
 They utter their great Creator's love,  
 Though His voice be never heard.

REFRAIN.—Let us trust in Jehovah, for He will deliver us,  
 Let us rest in His Love and take Him for our guide  
 For His mercy endureth for ever and ever ;  
 For each of His Creatures the Lord will provide.

The "pillars" of the earth are the Lord's,  
 He hath set the world thereon.  
 He established it fast, that it cannot be moved,  
 For the Word of our God is strong.  
 It shall not be removed for ever,  
 Though the ages pass away  
 He spake the Word  
 Who rolls the sun in his course along ;  
 And who dare that word gainsay ?

REFRAIN.—Let us trust in Jehovah, for He will uphold us,  
 And His word in the heart giveth life like a fire,  
 He is slow unto anger and nigh those who call on Him,  
 And to each one who seeks He will grant his desire.

As a canopy spread o'er the earth's outstretched plane,  
 Is the firmament, or sky,  
 It divides the waters beneath from those  
 Above its grand dome on high,  
 And the lights in perfect order all  
 Fulfil their appointed way  
 He hangs o'er the earth  
 For signs and seasons, for days and years,  
 And to rule by night and day.

REFRAIN.—We will trust in Jehovah, His Word shall not fail us,  
 By His Word in six days were all things at first made,  
 It is life unto man who lives not by bread only,  
 And firm as the earth's great foundations He laid.

The gifted authoress has set the above Words to Music, which may be had  
 from her Ladyship, West Brow, Coombe Down, Bath.

## CORRESPONDENCE.

Letters intended for publication in the "The Earth Review" must be legibly written on one side only of the paper, and must have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. Short pointed letters preferred.

The Editor cannot, of course, be held responsible for the various opinions of his correspondents ; nor can he enter into correspondence respecting articles, &c, held over or declined.

Letters must be prepaid, and addressed to the Editor of the Earth Review.

"ZETETES," Plutus House, St. Saviour's Road,  
 Leicester, England.

## NOTES.

"Globe."—Anonymous correspondence not noticed.

E. Breach.—Your letter is good and interesting. But it proves too long for publication, in this number at least. Our space is very limited. With increased means we would gladly enlarge our borders. At present Letters must be short.

G. Revell.—Glad you like the *Satire*. Yes, the "globe" is spoken of in an ironical sense. Too late to quote in this issue what you say about southern stars. See Carpenter's Article, *How is it?*

D.N.—You sent 10d. instead of 1s. 3d. for "six copies altogether" of the E.R. We, are, therefore, not "encouraged," even "financially," by your illogical letter. We don't deny that men can sail round the earth ; but you fail to see that a thing may be round and flat too. Though a Christian, you deny the Bible account that the Earth is "established" on "foundations" so that it cannot be moved.

C.H.—Both your letters are much too long for our limited space. You own that "small areas of water may be flat." Then it is for you to shew that larger areas are spherical. We should be glad to make the *Review* a monthly if you could find us the means. Friends at least, might take a few copies of each number for free distribution. This would help, a little. Respecting "degrees" you have misquoted us. On page 3 April *Review* we said ; "There are only about 57½ such 'degrees' from the equator to the North Centre." Such "degrees" referred to distance, or lengths of "about 69½ miles to one degree," not to divisions of a supposed circle. Quote fairly ! We deny solar and stellar "gravitation," not simply because we "cannot explain how it acts," but because it never yet has been proved to act at all. Can you prove it ? If the sun "attracts," or pulls at the moon, why does it allow the moon to go from conjunction to opposition every month ? Is the sun's "pull" weaker during the increase of the moon than during the decrease ; or is the moon more "wayward" at such times ? Your "strongest argument against the flat earth" is not so unanswerable as you suppose. Your triangle consists of straight lines, of course ; and so you assume that the sun's light travels in a straight line through a long distance of the earth's atmosphere ! Hence your absurd and fanciful conclusions. No wonder Mr. Carpenter did not think them worth replying to.

If this is your best you had better try again! Publish a pamphlet for yourself, with your diagrams; and we will shew you whether Zetetics can be accused of a "conspiracy to ignore the truth they dare not attack." Or, if you prefer our pages, guarantee us payment of the printers' bill to the proportion of pages and diagrams required? The "conspiracy to ignore the truth" is on the other side, friend. For other points in your letter see the article headed "Our Critics," which also answers other correspondents. ED.

Mr. Carpenter, author of "100 Proofs the earth is not a globe," writes respecting the Bedford Canal Wager saying;—I beg to say that "there is only one man living besides Mr. Alfred Russel Wallace who CAN give 'a true and detailed account' of this transaction, and that he will be happy to do this; but that it has been done over and over again, in pamphlet form, and before the people took that interest in the question they now do. I was with Wallace the whole week and watched his winning ways!" W.C.

The following note was received by a Zetetic, Mr. W. Bathgate, from a gentlemen in Napier (lat. 40°) New Zealand.

OCT. 9TH, 1880.

"Dear Sir,—Last night at 12 p.m. the Southern Cross was setting in the south: and I could only see three stars. The Cross turns round, falling over towards the south, and its change of position, which is regular, shews that it must rise and set.

Yours respectfully, J. W. WORBOYS."

Major A.P. of the R.E.—Your statement that "23½° should be measured from the centre of the earth" is replied to in the article entitled, *Our Critics*.

The sun and moon may float in ether, being comparatively small and light, ethereal bodies; but the earth is not an heavenly body, and being heavy and solid it could not possibly "float in space." Your diagram is incorrect: the line E F should be parallel with M Q, and parallel lines never meet,—ED. E.R.

#### Letters to the Editor.

Dear Sir,—It having come to my notice that letters sent me containing Postal Orders have been lost in transit through the post, I herewith beg to inform our friends that a printed official receipt, or a temporary acknowledgment is always sent by return of post for all such monies received. Therefore should they not receive either one or the other let them at once notify me that the Post Office authorities may be communicated with.

Yours faithfully,

JNO. WILLIAMS.

Dear Sir,—The smoke of the Globe" thickens around me, can you help me out of it?

In Joyce's Scientific Dialogues (p. 73) we read:

Question.—Is there any axis belonging to the earth?

Answer.—No; but . . . the earth turns round once in twenty-four hours, so astronomers imagine an axis (exists) upon which it revolves as upon a centre.

How can an imaginary axis, "incline or slope over 23½ degrees out of the perpendicular," as it is said to do so (p. 82) in these Dialogues? Where's the proof of it? BALAAM'S ASS.

The slope or "inclination of the Axis" is also "imaginary," like the greater part of modern theoretical Astronomy. ED. E.R.

#### SEA LEVEL.

Sir,—In August last I, with several other friends, being in Oban for a holiday, took a trip for a day in a small yacht on Loch Lorne, and being a glorious sunshiny day and so calm that

not a ripple was seen, and being becalmed for an hour about mid-day we observed a good many sights of various kinds. Amongst other things that we saw was a yacht, which the captain told us was twelve miles distant. We saw all the masts and part of the hull, and to get a better view of her we took our binocular opera glass (a good one). Now, sir, would'nt it require a funny curvature table either with or without the odd fractions to explain how we saw the hull of that vessel twelve miles off? According to a table furnished by the present Astronomer Royal recently, it ought to have been 66 feet below the line of sight; but the "table" that we saw it from was the side of our yacht, and we concluded the sea was level. And sir, I have in my possession a letter from the engineer of the Ship Canal Manchester, saying there is no need to make any allowance for curvature. Perhaps someone can tell me which end of the Suez Canal is the highest, and how much curvature was allowed for in its construction, and where he may find the "tables" for it.

Yours respectfully,

JOHN SMITH.

Siddal, Halifax.

#### "PARALLAX" TRIUMPHANT.

Dear Sir,—You are doubtless aware of the one-sided "controversy" (?) going on in "The Future" respecting the shape of the earth. The editor is evidently afraid of his readers seeing our side, consequently he declines to insert my letter in reply to "Enquirer" and so warns me, that I am "not to touch his figures" of "The Future." In his letter to me, I was amused to find that he is so simple as to think that he has found a man who can with the magic wand of Theoretical Refraction, "vitate, invalidate and nullify" all the practical "proofs of the shape of the earth, or the configuration of the surface of Water"! He says, "after "Enquirer," has finished his demolition of "Parallax" &c. "Demolition" indeed! Why, the editor knows as well as I do, that the evidence of "Parallax" being practical, is by consequence, invulnerable. He further says, "Morrison's 'New Principia' is much superior to any of either your productions, or those of 'Zetetes' and 'Parallax' together." Well, if he refuses our evidence let

him accept the evidence of "Enquirer," who in the April issue says, "but it is known to all that the surface of fluids at rest is level for all practical purposes for quite short distances beyond all possibility of disproof." Yes, quite so, the Zetetics reply—"for ALL PRACTICAL PURPOSES"—and that's why our "Jack Tars" when they go to sea take Mercator's chart which shews him that the water is level, and the sea a vast irregular plane! You see sir, the sailing of ships is a very practical thing, and consequently requires practical facts to navigate by, so "Jack" just lets the Globe roll down the scupper hole. But is it possible that "Enquirer" and the Editor of the "The Future" are so biased as not to be able to discern, that when anything is "level" for all practical purposes, it must be absolutely level, and consequently cannot be a part of a curve? Yet "Enquirer" says plainly, that, "the level is a curve"! Well I say this is a level falsehood, to prop up a lying theory. But of course theoretical purposes are not "practical purposes" and this is why "Enquirer" very kindly "leaves others to discuss whether it is proper to use the word 'level' in respect of the surface of fluids at rest" You see Sir, how these Newtonians play their conjuring tricks with simple language, using words with a double meaning to bolster up their false teaching! "Enquirer" proceeds by informing us that "Were the earth a plane"—and he shews that it is for "all practical purposes"—"Were the earth a plane, the horizon at sea would seem to arise about us like the sides of a bowl, just as in fact (mark this please) our horizon does when a balloonist sees it from a great height." Why a London Dust Cart man could tell him that when he saw the horizon as he passed over from Southend to Sheerness it was like a piece of a side of a bowl before him when he was looking seaward! I defy any man to refute me when I say, that upon any ocean the horizon seems to arise about us like the sides of a bowl: and therefore it is the identical phenomenon that is seen by balloonists. If this is not so, why does the sailor:—"climb the mast to see his native shore"? Yes, Sir, "Enquirer" has shown that the earth is a plane! You cannot see over a curve, until you have surmounted it; and the "offing" as it is called, is always at a distance, Professor M. Bouguer states that "when a

man stands upon a level plane, it does not seem to rise sensibly, but at some distance from him." "Enquirer" says "a dead level would appear as a bowl." But "Enquirer" did not say which side of the bowl was to be uppermost! But doubtless as "there is neither up nor down in space," he will be able to conjure his bowl to suit his theory, and further blind those who are already astronomically hypnotized.

But I must refer again to the "demolition of Parallax." I suppose that the hour of burial will be notified in "The Future." To those who have never thought for themselves on the subject, the "demolition of Parallax" attempted by "Enquirer" in the May issue of "The Future," may appear "unanswerable," and the more so since we are not allowed to reply, lest we should break the nice glass case the Editor has put over his friend. What a valuable "controversy" it will be when only one side is allowed to be heard! "Enquirer" says, "I grant at once that if curvature only has to be considered, 'Parallax' has proved his case. But I am about to prove (he wishes he could) that curvature is not the only matter to be considered." But I ask, *who said* that curvature was "the only matter to be considered"? I am afraid we shall prove that "Enquirer" is suffering from curvature mania. "Parallax," never in any experiment considered it as, "the only matter to be considered," and neither does any Planist that ever lived, either before Copernicus, or after him! Are misrepresentation and falsehood the only weapons our opponents can use to spin their occult Globe with?

"Parallax" was a thorough and practical scientist, who knew the globular theory in all its ramifications. The refraction he denied is the refraction I deny, and I herewith challenge "Enquirer," the Editor of "The Future," and any astronomer, to prove the existence of, viz: his theoretical refraction. Why it is like trying to prop nothing up against something. "Enquirer" says, it is "always in action." Now let him face me and prove this statement. "Parallax" says "refraction can only exist when the medium surrounding the observer is different to that in which the object is placed." Now says "Enquirer," this "conclusion of 'Parallax' is of the greatest consequence." *Granted* says

the Planist. But says "Enquirer"—"it is wrong." Then we reply, prove it. But before you do, it will be as well to remember that those who teach earth curvature assert that "when refraction exists one tenth is added to the distance." Now you see that the schoolmen teach that there are times when refraction does not exist don't you? And now I will shew you how they prove it:—

"James—I should like to see an experiment to confirm this." i. e. the existence of refraction.

Tutor—I have no objection: in every case you ought to require the best evidence that the subject will admit of (Hear hear). Bring me your multiplying glass: look through it (A Hotten'ot wants to know if "it" is "another medium"?) at the candle . . . for by the principle of refraction, the image of the candle is seen in as many places as the glass has surfaces." We reply, of course it will. Joyce's Scientific Dialogues. It is quite amusing to see the array of "facts" "Enquirer" produces in support of this "demolition"! Why we could make him a present of plenty of such. Here's one for his consideration. Perhaps he will account for the phenomena in *The Future*. It is from Shanklin, I.W. "I see at low tide, from my window, which is 22 feet above high water mark, a window in a house on the English coast with the telescope on a clear day, just above the horizon. As the tide rises this is cut off from sight. I am still un-flooded, and that other house looks contented when the tide goes down again. How is this?"

Now "Enquirer" what was your refraction doing that it did not "raise" that house "visually above its true place of being," seeing that you assert, "that the refractive powers of the atmosphere have inherently and constantly this elevating power," and that "the effect of refraction is shewn to be constant"? The scientist who wrote it declared he could not account for it only "by supposing that the curve of the earth came between him and it"! I suppose he meant the curve of the water, for when the tide was out he could see the house. Or does "the curve of the earth" come in and go out with the tide? I should like to know, you know.

Now Sir, I cannot notice all "Enquirer's" facts, which are better proofs that the earth is a plane rather than a globe; but I will notice the first. He says; "General Roy drove thirty pickets 100 feet apart, so that their heads appeared in a right line. This was in the afternoon. In the morning the heads of the pickets exhibited a curve concave upwards. (Trig. Survey. Vol. 1, p. 175): Object and observer in one medium. This is enough."

Doubtless "this is enough" for one who has a theory to sustain, but it is not enough for one who is honestly investigating phenomena in quest of absolute truth. It should at least have been apparent to "Enquirer"—though he says, and he emphasises it; that refraction in effect is always in action"—that there must be some different cause of the morning as distinct from the evening phenomena. But No! "this is enough," so long as he thinks it will demolish "Parallax" If refraction is "always in action," why did the picket heads not present the same appearance in the morning as they did in the evening? If refraction is "always in action" causing things to "exhibit a curve concave upwards" how came it about that the picket heads at any time appeared in a right line? Is "a right line" a part of a "curve"? If the "refractive powers of the atmosphere have constantly this elevating power," why were the picket heads not elevated in the afternoon? "Enquirer" says, "the effects of refraction are shewn to be constant." Hence he contradicts himself! for he says, "refraction is variable in its effects." How can the effects of anything be constant when they are variable? Is this a specimen of the "claptrap" that "may be dismissed as worthy only of the Tegaro Academy of Sciences," that "Enquirer" makes mention of? yet, this is the way "Enquirer" hopes to "demolish" Parallax. He must stand informed—for he is evidently ignorant of the fact—that scientific instruments are used to indicate the existence or the non-existence of atmospheric refraction. When the reading of those instruments are found to be unaltered from what they were when exposed to the atmosphere, it is for "all practical purposes," proved that refraction does not exist. See "Parallax," p. 31—33. "Enquirer" must know that when he says, "they seem to have no knowledge of, or no regard

for, the effects of Refraction" he says what is utterly false. "Enquirer" asks for "the facts" of the Bedford Canal experiment of 1870, while the Editor of the *Future* privately refuses to insert our letters! In the February *Future* he said "the curvature you deny is imaged there before you." Is it! and pray to what extent? If "only 5 feet was declared to be certainly shewn" why did Mr. Coulcher say, "the sketches showed a depression at the end of six miles of about 20 feet, not allowing for refraction." Like "Enquirer" he contradicted himself to support the globe theory! I wonder what "Enquirer's" refraction, "which is always in action," and "constantly elevating things," and causing them to "present a curve concave upward" was doing then? According to Mr. Coulcher and Professor Wallace, it presented a curve concave downwards! which is the right way of that ugly curve "Enquirer"? You know that the rate of curvature in six miles is 24 feet, Why was it not found? You know it cannot be found? You know it cannot be found anywhere in the world, hence your trickery about "refraction." That the earth is not a globe is as evident as that the sun is shining. Every practical test proves we are right. Even "*Science Shiftings*" declares it, for in the issue for May 20th, we read, "the Nile has a fall of only six inches in 1,000 miles!" "Enquirer" says "all optical objections were disposed of by a specialist before the umpire gave his decision." Is he ignorant that it was only the "specialist's" assistant who gave the decision, and in doing so, "to take into consideration the theory of the earth's roundness" and afterwards requested Mr. Walsh to "defer his decision"? Does "Enquirer" consider that that fact "is one more convincing proof of the rectitude of the award of the umpire"? Let him "enquire" more. In conclusion I would just notice the most important "fact" of the whole transaction. "Enquirer" says, "it will be noticed that the three-mile signal is below the optical centre of the theodolite, and the six mile signal is below the three-mile signal." But this gives only two signals. Where was the third signal? Why did Mr. Wallace omit to put up the third signal? Is it an act of honesty to break an agreement? Was not the signal that was omitted the



most important one in the field of view, because the results to be accurate should have been the outcome of the fulfilment of the agreement. Evidently water is level and they know it for

they dare not put up that third mast or signal and try the experiment again!

Yours, &c.,  
A HOTTENTOT.

This letter is too long.—Ed.

### Cuffings.

#### THEORETICAL ASTRONOMY.

Astronomers are very fond of boasting of the wonderful exactness of their science, and that it is based on the principles of incontrovertible mathematics; and of ridiculing astrology as a *pseudo*-science. The exactness belongs to practical and not to theoretical astronomy. For example, when the writer learnt the principles of astronomy at school, he was taught that the Sun was exactly 95 millions of miles from the earth; now-a-days astronomers say that this was an error, and that the Sun is only 92 millions of miles distant. Newton made the Sun's distance to be 28 millions of miles, Kepler made it 12 millions, Martin 81, and Mayer 104 millions! Dr. Woodhouse, who was professor of astronomy at Cambridge about fifty years ago, was so candid as to admit the weakness of the Newtonian speculations. Woodhouse wrote: "However perfect our theory, and however simple and satisfactorily the Newtonian hypothesis may seem to us to account for all the celestial phenomena, yet we are here compelled to admit the astounding truth that if our premises be disputed and our facts challenged, the whole range of astronomy does not contain the proofs of its own accuracy."—*The Future*, Feb. 1892.

#### "A GEOLOGICAL BLUNDER."

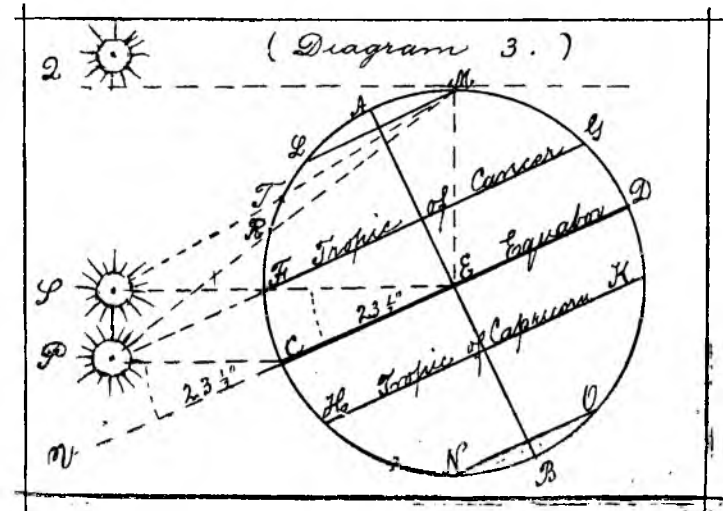
"Sir Archibald Geikie, Director-General of the Geological Survey, has at last taken notice—in *Nature*, we need hardly say—of our article condemning the attempt to give the Survey all the credit of some of the most remarkable discoveries of the age which have been really made by men unaided by the State, and toiling for daily bread as teachers of science. We had heard something that caused us to expose this scandal. The fact is the official ring of State-endowed science, not content with *jobbing* the Royal Society and its distinctions, as their critics have been showing in the *Times*, are meditating a raid on the taxpayer. They want more money, and as a preliminary step their official organ *Nature* of course begins to "boom" their work and reputations. This is a good old game. The only novelty in the situation is that a daily newspaper, for the first time in history, ventured to show it up. We do not desire to be harsh to the illustrious scientists who edit *Nature*. It is the duty of all official organs to make big men out of small material. But when they began to do this by coolly confiscating the achievements of private

and independent workers for one of the managing partners of the great firm of Huxley, Geikie, Dyer and Co., limited, we thought it time to protest. . . . The letters that have been appearing in the *Times* make some funny revelations about the way the Royal Society is "worked." Sir Archibald Geikie's defence suggests that if the *Times* only followed up the game it scented it would should show its readers plenty of sport. We ourselves would make no objection to a vote of money in aid of researches into the "frank" and "practical" manner in which, *and the terms on which*, the official gang of science frequently "acknowledge" the achievements of young outsiders. Extract from an article in *The Daily Chronicle*, Feb. 2nd, 1893.

#### OUR CRITICS.

The pamphlet we lately published entitled *The Midnight Sun*, the latter part of which is found in the July number of the *Earth Review*, has fallen like a bomb into the camp of the enemy, and has created some consternation amongst our opponents. A few are trying to show that our conclusions are premature, and our diagrams, especially, Diagram I, not correct. Fair controversy will do good. Anonymous correspondents we shall not notice; but the criticisms of one or two who have honestly sent their names we shall reply to. Our only object is truth. But friends, and foes, should remember that our means are limited. We have been to the expense of another diagram to shew the points of our objectors. We will take our correspondent C.H. as a typical objector, as his criticisms approach nearest to those of a "scientific" character.

Referring to Diagram I, he says;—"The sun should be overhead at the point *F*, but it is not. It ought to be on a prolongation of the line *E.F.* not *G.F.*" THE EARTH AS A GLOBE.



As this is the chief objection of other critics, and one of our own friends as well, we will take up this point first, and elucidate it by reference to Diagram 3. It is thought that the sun ought to be placed at *S* in a line with *E.F.*, and not at *P* in a line with *G.F.P.* Why so? Because *S* is vertical over the point *F* on the "globe" while *P* is not. True. But our critics forget that the Tropic of Cancer is not on the earth but up in the heavens! This fact has been overlooked or forgotten by all our critics. Perhaps we were not sufficiently explicit on this point. The line *F.G.* is marked across the "globe," for the sufficient reason that we cannot put it above the paper; but it really represents a line and a position in the heavens where the sun is found in our Northern summer. Hence we prolong this line *G.F.* to *P*, and place the sun at *F*; where it ought to be. Our critic further says;—"You assume the sun to be small and near." No! we reply. We can see that the sun is comparatively small compared with the earth, and we know that it is near from the data given us by the astronomers themselves. How? Thus:—

When the sun is in the tropic of Cancer we are told that it is  $23\frac{1}{2}^{\circ}$  north of the equator, or the line *C.D.*, which is an imaginary line resting upon the earth. Let this line be produced to *V*, and from the point *C*, on the surface of the earth, draw the line *C.P.* making  $23\frac{1}{2}^{\circ}$  with the line *D.C.V.* Then, where this line *C.P.* crosses the produced line *G.F.* is the position for the sun to be placed in, namely at *P*. No! cries the objector, "the  $23\frac{1}{2}^{\circ}$  should be measured from the point *E*, at the centre of the earth." Oh! We retort: Who says so? The astronomers, of course. Why? Have they ever been inside the earth and seen the sun from the centre of the "globe" in the position of  $23\frac{1}{2}^{\circ}$  north of the equatorial plane? We never heard of but one philosopher who confessed he had been down below—into hell?—for his instructions! This was the pagan Pythagoras, who was the originator, though perhaps not the inventor, of the spherical idea. Then why should the sun be placed at *S*? Because the enemies of the truth tell us to place it so. No, No! friends, it won't do! We must place the sun *where it is seen*, " $23\frac{1}{2}^{\circ}$  north of the equator," if you like; but as seen from the point *C* on the surface of the earth, and not  $23\frac{1}{2}^{\circ}$  from the centre, where it never has been seen. And this is where we have placed it.

#### NOTHING GAINED.

However, as we have truth on our side we can afford to be generous, and although truth is still truth, yet for arguments sake, we will put the sun at *S*, where our critics want it, in a line with *E.F.* produced. Now draw the line *M.T.S.* from the position of the spectator at *M* on the Arctic circle at midnight, to the sun at *S*. This line *M.T.S.* will be the spectator's new line of sight, instead of the line *M.R.P.* Both have to pass through the "globe" for several thousands of miles! Suppose

*M.T.* is about 5,000 miles and *M.R.* 6,000 miles, what have our critics gained? Is it easier for them to look through five thousand miles of land and water than six thousand? If so they are welcome to the difference if it relieves them any.

Now the only way our friends can get out of these difficulties is by assuming that the sun is about 93,000,000 of miles away and more than a million times larger than the earth, contrary to the testimony of our senses as well as to that already adduced. Let them give us a single proof of these assumptions, but one not based upon nor begging the question at issue, and we will yield. But our critics must be at the expense of their own diagrams, and not think to claim about one half of our space under the plea of a paltry subscription for one year's *Reviews*. We must be fair to our friends, the few who nobly bear all financial burdens. We have been accused of trying a money-making venture; but let our accusers try an opposition journal and see how that paper would pay. Yet one on the popular side ought to pay. We have often wondered how it is that there is no popular astronomical journal got up by our friends the astronomers. But, doubtless, although they have the means, they have good reasons for not submitting their scientific theories and faiths to the open discussion of a cheap periodical.—See further replies to C.H. under *Correspondence*.

#### How Is It?

It has been noticed that "explanations" very often fail to explain! A case in point is that of the motion of the stars when they are said to travel as the hands of a watch. If we look downwards upon a watch as it lies upon the table, the circle described by the hands may be correctly spoken of as a right-hand circle. It is the circle described by the phonographer when he writes "s-pr" in contradistinction to the circle in "s-p," which is a left-hand circle. The *St. Louis Republic* is quoted by the *Baltimore Sun* as follows:—"The way Cyclones Turn.—The question is often asked: Why do cyclones, 'whirlwinds' and tornadoes all persist in the polar whirl of from right to left? Astronomical speculators have supposed that all the planets once existed as rings of thinly scattered matter around the sun, and that these rings were annular segregations from a vague, irregular, scattered mass that turned one way in spiral courses, thus determining the direction in which the rings revolved, and all the rest from this took the same course. 'But,' you say, 'why did the nebula revolve at all?' It grew from chaos, and chaos, presumably, possessed an inherent motion from right to left. This being the case, from that time to this, sun, moon, stars, planets, cyclones and tornadoes have adhered to the original habit." Now, it may appear strange to say that this means nothing at all; but it is a fact! If the "astronomical speculators" taught us that sun, moon, planets and stars all revolved as we see them, there would be no difficulty in the matter at all: but they do not. And the description would answer just as well if we were told that the motion was from left to right; since every circle may be said to go either way indiscriminately! So that, as the old showman said: "you pay your money, and you take your choice!" But, when we want to get at the truth, this mode will not answer.



Let us see, now, wherein lies the difficulty. Take the hands of a watch as indicating the motion of the stars. The watch we naturally look at from above downwards; the stars from below, upwards. And a deal of difference is made by this; the description being useless without qualification. Again, if we describe the motion by pointing with the hands and following it, when looking to the heavens, the motion of the circle is a "left-hand" motion. But, if we take the watch, as it lies on the table, the circle described would be a "right-hand" circle. So that a true description of the motion of the stars north of the equator is that of a left-hand motion as we gaze upwards at them, and a right-hand motion if we imagine them to be reflected into the watch glass.

Now, in gaining information from the Southern parts of the earth the difficulty is intensified. It has to come by written description, and great care is necessary. If it is so easy to get "mixed up" here, at home, with so simple a matter, it will never do to jump at a description from New Zealand unless we be sure that the folks there are exempt from such difficulties as we ourselves have. A New Zealand correspondent says: "I am an eye-witness every clear night to the various groups of Stars making a circle in our Southern heavens in the same way as your Northern Stars circle in your Northern heavens." It is a very simple matter to write this, but "the same way" requires a little more to be said about it, since astronomers tell us they go the *reverse* way. And if we are not clear in describing one way here, in the north, it would be quite un-zetetic to accept without a searching investigation the meaning of "the same way" or the "reverse" way from New Zealand. And the difficulty spoken of is not diminished by the making of a diagram, but rather increased. Here is a plain piece of paper. I put the letter O upon a straight line to represent an observer. Above that, at any distance I place the letter S to represent the North Star. But both the observer and the star are upon the same piece of flat paper, and imagination is necessary. A line from O to S would be a perpendicular from the ground line, but we have to *suppose* it to represent a *vertical* line. (In the same way, the picture of a plane is upwards on the sheet of paper; that of a view up-hill, is the same; and a view down-hill could not be told from either of the others, so far as the plane of the paper goes!) Now to represent Stars circling around S. in the North, the "arrow" would point to the left *between* O and S., and to the right *beyond* S. That would be as the watch hands go. Now turn to the heavens. The "arrows" would point similarly, but the motion is "left-hand" instead of right-hand as in the watch; and the whole scene is reversed from its position on the paper! In other word, a right-hand motion upon the paper is a left-hand motion when we face the sky; and the stars appearing in the diagram *above* the North Star are *below* it. Therefore in accepting information from our Zetetic friends in the far south, we must get them to state, definitively, which of these two modes of looking at the question it is of which they speak; for if anything founded upon misunderstanding come over the waters to us, it certainly will not fit into the Zetetic philosophy of of "PARALLAX."  
Baltimore, Maryland.

WM. CARPENTER.

This caution is very opportune. Our New Zealand friends should also state in describing their phenomena whether their faces are towards the North or the South; and whether the sun rises and sets due east and west of them, and when? or in a north-easterly and north-westerly directly, when he has his greatest south declination? *Ed. E.R.*

# THE EARTH - NOT A GLOBE - REVIEW,

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 4.

OCTOBER, 1893.

PRICE 2D.

## SHIPS AT SEA.

WE have already given proofs that the earth we live on is an extended plane; and one good practical proof of this is quite sufficient to discredit all the so-called proofs of the earth's sphericity. The practical surveying of the surface of water proves that it is level; and if the surface of canals, rivers, and seas, is level then the earth must be a plane. We begin with practical proofs; but, on the other hand, our opponents begin by first assuming the earth is a globe, and then looking about for some phenomena to support that assumption. This is not scientific; yet it is the way of our best astronomers. They first assume, and then try to support their assumptions.

That which is most relied on by the Newtonians to prove the earth and sea to be globular is the phenomenon of the disappearance of ships at sea. The hull of a vessel generally disappears first, and when it does so it is quietly assumed that the hull has gone down behind a hill of water. That this is a fallacy may often be proved by applying a good telescope, when, in clear or calm weather the hull may be brought again into view. This shews that other causes than the one imagined operate to cause the disappearance of the lower part of a vessel before the sails &c., in the upper part are lost to view. We will mention some of these causes; and first and foremost we shall offer some remarks under the heading of

## PERSPECTIVE LAWS.

It is a well known law of perspective that parallel lines when produced far enough appear to meet. This may frequently be seen on our railways. Now if the earth be a plane with the heavens outstretched above it, they ought in the distance to appear to meet. They do so appear to meet, everywhere in the horizon however distant; therefore the earth and sea form a vast extended and circular plane. The

Let us see, now, wherein lies the difficulty. Take the hands of a watch as indicating the motion of the stars. The watch we naturally look at from above downwards; the stars from below, upwards. And a deal of difference is made by this; the description being useless without qualification. Again, if we describe the motion by pointing with the hands and following it, when looking to the heavens, the motion of the circle is a "left-hand" motion. But, if we take the watch, as it lies on the table, the circle described would be a "right hand" circle. So that a true description of the motion of the stars north of the equator is that of a left-hand motion as we gaze upwards at them, and a right-hand motion if we imagine them to be reflected into the watch glass.

Now, in gaining information from the Southern parts of the earth the difficulty is intensified. It has to come by written description, and great care is necessary. If it is so easy to get "mixed up" here, at home, with so simple a matter, it will never do to jump at a description from New Zealand unless we be sure that the folks there are exempt from such difficulties as we ourselves have. A New Zealand correspondent says: "I am an eye-witness every clear night to the various groups of Stars making a circle in our Southern heavens in the same way as your Northern Stars circle in your Northern heavens." It is a very simple matter to write this, but "the same way" requires a little more, to be said about it, since astronomers tell us they go the *reverse* way. And if we are not clear in describing one way here, in the north, it would be quite un-zetetic to accept without a searching investigation the meaning of "the same way" or the "reverse" way from New Zealand. And the difficulty spoken of is not diminished by the making of a diagram, but rather increased. Here is a plain piece of paper. I put the letter O upon a straight line to represent an observer. Above that, at any distance I place the letter S to represent the North Star. But both the observer and the star are upon the same piece of flat paper, and imagination is necessary. A line from O to S would be a perpendicular from the ground line, but we have to *suppose* it to represent a *vertical* line. (In the same way, the picture of a plane is upwards on the sheet of paper; that of a view up-hill, is the same; and a view down-hill could not be told from either of the others, so far as the plane of the paper goes!) Now to represent Stars circling around S. in the North, the "arrow" would point to the left *between* O and S., and to the right *beyond* S. That would be as the watch hands go. Now turn to the heavens. The "arrows" would point similarly, but the motion is "left-hand" instead of right-hand as in the watch; and the whole scene is reversed from its position on the paper! In other word, a right-hand motion upon the paper is a left-hand motion when we face the sky; and the stars appearing in the diagram *above* the North Star are *below* it. Therefore in accepting information from our Zetetic friends in the far south, we must get them to state, definitively, which of these two modes of looking at the question it is of which they speak; for if anything founded upon misunderstanding come over the waters to us, it certainly will not fit into the Zetetic philosophy of of "PARALLAX."

Baltimore, Maryland.

WM. CARPENTER.

This caution is very opportune. Our New Zealand friends should also state in describing their phenomena whether their faces are towards the North or the South; and whether the sun rises and sets due east and west of them, and when? or in a north-easterly and north-westerly directly, when he has his greatest south declination? *Ed. E.R.*

# THE EARTH - NOT A GLOBE - REVIEW,

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 4.

OCTOBER, 1893.

PRICE 2D.

## SHIPS AT SEA.

WE have already given proofs that the earth we live on is an extended plane; and one good practical proof of this is quite sufficient to discredit all the so-called proofs of the earth's sphericity. The practical surveying of the surface of water proves that it is level; and if the surface of canals, rivers, and seas, is level then the earth must be a plane. We begin with practical proofs; but, on the other hand, our opponents begin by first assuming the earth is a globe, and then looking about for some phenomena to support that assumption. This is not scientific; yet it is the way of our best astronomers. They first assume, and then try to support their assumptions.

That which is most relied on by the Newtonians to prove the earth and sea to be globular is the phenomenon of the disappearance of ships at sea. The hull of a vessel generally disappears first, and when it does so it is quietly assumed that the hull has gone down behind a hill of water. That this is a fallacy may often be proved by applying a good telescope, when, in clear or calm weather the hull may be brought again into view. This shews that other causes than the one imagined operate to cause the disappearance of the lower part of a vessel before the sails &c., in the upper part are lost to view. We will mention some of these causes; and first and foremost we shall offer some remarks under the heading of

## PERSPECTIVE LAWS.

It is a well known law of perspective that parallel lines when produced far enough appear to meet. This may frequently be seen on our railways. Now if the earth be a plane with the heavens outstretched above it, they ought in the distance to appear to meet. They do so appear to meet, everywhere in the horizon however distant; therefore the earth and sea form a vast extended and circular plane. The

disappearance of ships at sea can be explained, and can only be explained, in harmony with these facts, and the laws of true perspective.

A second perspective law may be stated thus ;—All straight lines, or objects moving in straight lines, which are *above* the eye of the spectator, seem, as they recede, to come down to the level of the eye ; and all objects or straight lines *below* the eye as they recede seem to rise until they appear on a level with the spectator's eye, or line of sight.

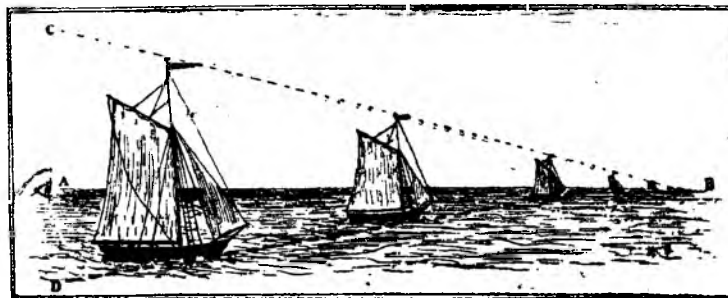
And, thirdly, all objects ultimately vanish in this line of sight, which appears to be on a level with the eye, in what is called the vanishing point ; and those objects which are *above* the eye never fall below the line of sight, and those objects which are *below* the eye never seem to rise above it.

Now let us apply these laws of perspective by referring to the following diagram, illustrating the disappearance of a vessel at sea.

Let A B represent the line of sight, or the height of the horizon, which is always on a level with the eye of the spectator, in whatsoever position or altitude he may place himself.

Let D E represent the line made by the hull of a vessel in sailing away straight out to sea ; and C B the straight line made by the flag of the vessel at the top of the mast.

VESSELS AT SEA, HULL-UP !



In this position it will be noticed that the eye of the spectator is nearer to the level of the hull than it is to the height of the ships flag. This is a common position. Then according to the laws of perspective, the line C B being above the eye will seem to descend to a level with the line of sight A B, and the line D E will appear to rise up to it, both getting lost somewhere in it in the distance. But here we must point out a very common error. It is generally supposed that all such lines vanish at the same point ; but they do not. It depends upon their position. If a man were to place his eye eight inches above the ground

he would expect to see nothing lying on the ground beyond one mile ; but if a large balloon were floating one mile high it would be visible many miles distant. A wheel eight inches high running on the ground would vanish much earlier than a balloon a mile high ; yet both would vanish on, or before, reaching the same horizon, or line of sight. The higher an object is the longer it will remain in sight, as the distance increases between it and us ; and the lower or smaller an object is and the sooner it will reach its proper vanishing point. The same rule applies to objects receding *below* the eye, or line of sight. Now if the angle A E D be less than the angle A B C, as in this case it is, it is evident that this angle A E D, *with all that is contained in it*, must be lost to view, or reach the vanishing point, before the larger angle A B C and that which it contains. In other words the line D E meets the line A B, in the vanishing point E, before the line C B which vanishes further off in the point B, its point of contact with the line of sight A B. So that the hull of a vessel in this position would naturally be lost to view before the upper part of the sails or the flag of the ship had disappeared. In calm weather, on the application of a powerful telescope, this angle would be magnified, and so the hull of the vessel would reappear, which it could not possibly do if it had gone down behind a hill of water. The vessel would be found hull-up rather than "hull-down." Thus perspective alone would account for a vessel appearing what has been mistakenly called "hull-down."

Other causes often operate to hide the hull of a vessel before the ship's flag and masts are hidden from view. When the weather is clear the sails and the flag can be seen more easily because they are against a background of clear sky ; whilst the hull of the vessel is down, and generally below the eye, in a darker and thicker element surrounded by the spray and splash consequent upon sailing. All this has a tendency to hide the lower parts of a vessel first and to display the upper parts last ; yet no note is taken of these things in astronomical works. No ! Their theory requires the vessel to have gone down behind a hill of water, and other possible causes of the hull's disappearance are never so much as hinted at. If the whole vessel were much below the spectator's horizon, then the whole of the ship would vanish before reaching up to the line of sight. Under such circumstances it could not possibly be "hull-down."

#### Astronomical Violations of Perspective.

In astronomical works we have frequently seen the laws of perspective grossly violated. For instance, a spectator is placed on high, sometimes two or three hundred miles ; and, instead of his line of sight being a tangent to the sphere at the point of observation, he is made to look *down* to his horizon. Such a view is never found necessary in

Nature ; nor is it possible on a plane. The ship is placed a little way from the *top* of the illustrated globe ; then the hull is brought up from below the spectator's horizon to the top of the globe and *above* his horizon, and afterwards it is made to sink down behind the supposed hill of water or curve. This is simply an outrage upon Nature, and upon all true science and perspective ; as might be shewn by making another vessel sail away in the opposite direction. This vessel would have to begin to descend at once !

Let us refer again to our diagram. Objects below the line of the horizon A B *never rise above it* ; so that if a ship's hull be below the eye as starting out it will, though seeming to rise higher and higher, for ever remain below, as long as the spectator occupies the same position, until the hull is lost on or before reaching the line A B. This can be tested by anyone with the requisite amount of patience to watch. But if the earth were a globe according to the diagrams of the astronomers, the hull of a vessel though below the eye line would first rise above it on the horizon and be seen against a clear sky in the distance ; and then *afterwards* the hull would go down beyond the horizon. But it does not behave so ; therefore the earth is not a globe. If below the line of sight the hull disappears *before*, or vanishes on, reaching the eye-line, and never gets above that line at all. This, according to the laws of perspective, is just what ought to happen on a plane ; it does so happen, therefore the earth and sea form a plane, and the sea is really level. Thus the phenomena of the disappearance of ships at sea when carefully examined prove the very opposite of what they are generally supposed to prove.

Before concluding this article we would like to ask our astronomical friends a few questions on this subject. In the diagrams of ships at sea, given in astronomical works, Why are the ships placed near the top and not under ? Why is the first ship not placed *on the top* ? Why *near* the top, and always having to go *up* first and then to go *down* afterwards ? Has any object in Nature, ever been seen to rise perspective as it recedes, and then while remaining at the same altitude, to *descend* ? By whom ? Where ? and When ? Is not the observer always on the *top* of the earth ? If not, why not ? If the earth were a globe would not the horizon be a tangent to the sphere at the point of observation ? If so, ought not a ship to begin to *descend* at once as soon as it leaves the observer ? Why does a vessel not suit its behaviour to the globular theory ? Is it because it is only a theory ? Why do the astronomers violate the laws of perspective when they make diagrams of ships at sea ? And now when these tricks of so-called astronomical "science" are exposed, why should not all our readers believe the plain truth that the earth and sea form one vast outstretched and circular plane ?

ZETETES.

## SCIENTIFIC CREDULITY

*versus*

## RELIGIOUS BELIEFS.

(BY LADY BLOUNT).

" To give a true and unprejudiced account of any religious system, a man must once have believed in it, or he will give a superficial view of it ; and he must have ceased to believe in it, or he will be prejudiced."

In quoting the above from M. Renan, I can use the words of H. M. Prior, who was twenty years a minister of one of the seven Catholic Apostolic Churches in London, on opening the account of his experience therein. He said ;—" I am in this position." Yet in my case not in regard to sectarian or denominational churches alone, but also with respect to orthodox Astronomy. I formerly believed in theoretical Astronomy, but now I renounce it as being contrary both to facts and reason and the Holy Scriptures.

" The Earth is the Lord's, and the fulness thereof ; For he hath founded it upon the Seas, and established it upon the floods " Psa. 24, 2. These words give strength to the argument of the sceptics, against the authority of the Bible, so long as the popular teaching is upheld, both by themselves and Christians.

I remember a conversation I had some years ago with a man who I judged to be an Atheist ; or a Deist. He had been listening with others to a Mr. Walter Skinner of Brighton who was preaching on the obtaining of the future Life alone through Jesus Christ. We were on the Level at Brighton, and the Sceptic told me that his principal or sole reason for doubting Mr. Skinner's statements, "was grounded upon the fact (?) that the Book from which he took them was in direct opposition to Science." He further said that he was a student of science, and the opinions and discoveries of great and learned men, and therefore the gospel would not do for him, as the two, Science and the Bible, did not fit agreeably together. This shews how lamentable it is for a Christian blindly to yield the claims of "Science."

In regard to Christianity, the Sceptic said that the masses believed in it, for the reason that they either had no power of thinking themselves, or they did not exercise this power ; for they accept as truth without enquiry just whatever any preacher tells them who is under the impression that he is above his fellows in knowledge, or who desires some little notoriety. But, I replied, is not this the case to a large extent in science as well as in religion ? Sceptics profess to believe in science,

and astronomy, although they possess no practical knowledge thereon, just because some great man teaches these things, and the masses about them are brought up to believe them.

So that "Science" in all its branches, has its unthinking votaries as well as religion. I soon perceived that this man's faith was blindly fixed in the accepted or orthodox doctrines of what is termed "Science," especially Astronomy; and that everything in his mind was made to succumb to his prejudice and unreasoning faith in astronomical speculations. I asked him if God had not created the stars? He said, No! but that according to Laplace, the Sun had formed itself out of primitive nebulae, and that this was the case with myriads of other starry globes, including the Earth, all of which being huge sparks had been shot off the great fire-wheel of the Sun, like sparks from a grinding stone in rapid rotation! The Sun's immense distance accounting for its apparently small size, and its apparently small size being due to its supposed great distance! So they reason in a circle, and infidels as well as unthinking Christians believe them.

This sceptic said that he "believed" that the Sun was one million four hundred and nine thousand, seven hundred and twenty five times the size of the Earth; and that both these bodies in common with hundreds and millions of "other Globes" were formed by condensation from vapour as rain drops are formed in the clouds. He supposed they had done this of themselves, or by some mysterious process described as "the laws of Nature!"

The difference being that these rain drops required only a few seconds, whereas these supposed solid bodies and worlds required millions, and millions of years for their formation. Men talk glibly of these immense periods in the formation of the so-called "crust" of our earth, and they say that it must have taken millions of years for the crust of the "globe" to form and to cool. But what reason have the masses for believing this so-called scientific theory rather than the grand and simple account of Creation as given in the Bible? None! Christ by his miracles proved himself to be from God, and Christ endorsed the Mosaic account of the Universe. But sceptics are as blindly prejudiced in their unthinking scientific beliefs as the masses were in the dark ages in their unscriptural and theological faiths. Let us turn from all these teachings of men, whether they be of Newton, Herschel, Laplace, Arminius, Calvin or Luther, and let us turn afresh to Nature and the Word of God for our own information and instruction. Let us not turn away from the good old Book for the mere theories of a changing science. Let us have facts, not fancies, and let us read facts even in the light of a little common sense and criticism. Like others I once accepted these theories without exercising any thought and inquiry

thereon. But now I see it is impossible for one who really thinks to accept both the speculations of Astronomy and the Scriptures. I for one, therefore, prefer to stand by the Bible account of the Universe as it harmonises with all I have now learned of the real facts and appearances of Nature. As for all human fancies and astronomical speculations let them be discarded before we give up our trust in the Word of Him who made the World, and who promises Eternal Life to all who believe in His Son.

### "THE SUN'S DISTANCE."

BY G. W. WINCKLER, ASSOC. M. I. C. E.

Mr. Proctor remarks that the determination of the Sun's distance, is not only an important problem of general astronomy but the foundation to a great extent of all research into its character and economy. Until we know the sun's distance (he continues) we can determine neither his build nor his weight; and our views on other of his conditions, will be found to depend in an important degree, on the estimate we form respecting those two elements. A trivial or apparently trivial error in the solution of the problems on which the determination of the sun's distance depends, would result in vast errors in the computation of the sun's volume, &c., &c.

We endorse these remarks with much satisfaction, and now let us inquire how Astronomers have proceeded to ascertain the sun's distance from the earth. The planet Venus first of all is assumed to be revolving round the sun at a minimum distance of 68,459,000 miles, the plane of its orbit is *supposed* to be nearly in the same plane as the supposed orbit of the Earth, and this Earth is further supposed to be a rapidly revolving Globe. It happens as a fact, from time to time, that Venus passes between the sun and the earth, two such transits occurring in an interval of 8 years, after which they do not occur again for more than a century. When such an epoch comes round the Astronomers think it is their opportunity to find out the sun's distance from the earth. This is how they try to do it. They proceed to note the time occupied by Venus across the sun's surface. Two independent observers at the widest possible intervals take note of the two points when the Planet, as seen by each, appears to project itself at the same moment on the solar disc—thus, they obtain the angle from each of their stations intersecting each other upon Venus at an opposite angle on the sun. This parallax forms their basis for an elaborate series of calculations utterly inexplicable—and from these calculations the following results have been obtained. According to Hanson in 1854, the sun's distance from the earth is 91,659,000 miles,—according to Leverrier 91,330,000 miles,—according to Mr. Newcombe 92,800,000 miles,—according to Foucault

91,400,000 miles, and now accepted, as in all schoolbooks, in round numbers as 92,500,000 miles. Previous to this it was "found" to be very much less.

"The observation of the transit of Venus is confessedly the best method of solving the problem," so the Astronomers say. But is this so? We will see. What are the data required to work out such a problem on this method? 1.—The distance of Venus from the sun at the time of transit. But are they sure it is 68,459,000 miles? Proof is wanted. 2.—The distance of Venus from the earth at time of transit,—are they quite sure it is 23,541,000 miles? Proof wanted again. 3.—The velocity of the Planet. 4.—The earth supposed to be scudding along at 17 miles per second in the meanwhile. But no proof is given of the earth's motion. Yet it is upon these wild assumptions that they proceed to work out the "best method of solving the problem." Let us illustrate the case. Let us suppose that an Engineer (who is also an Astronomer) was requested to find the height of the Eiffel tower. According to the above "method" he would station his assistant at one spot and he himself take up another at an unknown distance from the tower and at a given signal, both would note the flight of a pigeon across a fixed disc on the top of the tower, and from these data, this astronomer would proceed to calculate the height of the tower. First, he will assume the distance he and his assistant are from the disc, say as 200 and 150 miles respectively. He will further assume the distance the pigeon flew at a velocity of 30 miles an hour from the disc and from the two Engineers as 75 and 125 miles respectively. Then after his elaborate spherical Trigonometrical calculations are completed on these wild suppositions, he should, if not quite dead to shame, cashier his Assistant and drown himself with his elaborate calculations inside his left boot! This is no exaggerated illustration. It is just what the Astronomers, who seem to have gone mad, have done in the case of the Sun's distance.

Now let us describe "the best method of solving the problem," that is, of finding out the height of the Sun or the Tower; and the "method" which will give accurate results in the Tower case, should also give accurate results in the case of the Sun's distance if we only had the required measurements. The Engineer (who is not an Astronomer) will first measure a base line from the foot of the Tower at C to a point B, and then prolong the horizontal straight line to another point say twice the distance at A. (*Readers must make their own diagrams*). To obtain great accuracy, he may station himself at A with a theodolite and station his Assistant at B with another theodolite. Let the top of the tower be marked D. There at the same time both will read the included angles C A D, C B D, respectively. By *plane* trigonometry

with the aid of a table of Logarithms, the engineer would then calculate the height C D in a few lines of a simple but correct calculation, and he will find, (if his base line and his angles have been correctly established) by adding the height of his theodolite from the ground level, that his calculated height, was not many inches far off the true height of the tower.

This method has the advantage of absolute mathematical demonstration—and with a slight modification for refraction—might be adopted in the case of the Sun. We maintain in spite of what Astronomers say, that this is not only the best "method" but the only method of solving the problem of the distance or height the Sun is from the Earth. The Sun in the month of March crosses the Equatorial line on a certain date. At noon it is immediately overhead or in the Zenith at some point on the Equator. Let our Astronomers measure a base line say in Southern Africa or in S. America due North or due South from a given point, and let this base line be say 200 miles long (the longer the better). Let two observers at these two fixed points work simultaneously (by telegraph) and observe the Angles of Elevation of the Sun's lower or upper limb at the same time—this will give one set of observations with its calculated results. Let the operation be continued through a series of observations on another base line say measured on the Meridian of Paris, and from Paris to some spot in Scotland, and calculations from each of these several readings will surely give a very close average distance the Sun is from certain places on the Earth near the Equator. If Astronomers would only undertake these practical experiments, instead of rushing all over the world to observe an Eclipse, we should have the true distance of the Sun. But what confusion of faces there would be over their present wild guesses. Instead of the fabulous distance they assert the Sun is from the Earth, they would demonstrate to all true Zetetics, or Investigators, that the sun bears only such a proportion to the Earth, as a gas jet bears to a sitting room, and that it is only a few thousand miles above us. Then Mr. Proctor's remarks with which this article began, will be charmingly appreciated, although no doubt to the confusion of modern and merely speculative astronomy.

## THE EARTH'S RHYTHMICAL BREATHING.

### A SURPRISING SCIENTIFIC DISCOVERY.

The following paragraph was cut from *The Leicester Daily Post*, Aug. 25th, and sent us by a correspondent who asks;—Does not this support the view that the earth is a plane floating on the mighty ocean? The paragraph was headed as above, and reads;—

We all know that there are ocean tides, spring and neap, and they are due to the positions of the sun and moon relatively to the earth. "The full of the moon" strikingly affects the sea. It did not occur to us to think whether it also affected the atmosphere and the earth itself. All that was noticed about it, apart from its marine influence, was that persons of unstrung nerves underwent crises at the full of the moon. Then so-called scientific men laughed at this belief, as being in the nature of old wives' fables. But being founded on observation it was nothing of the sort. M. Bouquet de la Grye, an eminent hydrographical engineer, has, after long years of patient study, calculated the atmospheric expansions and depressions which coincide with spring and neap tides. There have been cases in which air was moved in waves of 133 yards high, and in places where the barometrical pressure was seven-tenths of an inch, of six and a half miles. Near the upper surface of the earth's atmosphere condensations and dilatations of this magnitude are frequent. The human nervous system may be said to register these air waves. We are only aware they do so by the discomfort which we feel. The earth also registers them, and to its very centre. The incandescent and fluid matter under the earth's crust acts in concert with the air and sea at the full of the moon. In 1889 a German scientist, Dr. Rebeur Pachwitz, thought he noticed at Wilhelmshaven and Potsdam earth oscillations corresponding with the course of the moon. He wrote to the Observatory of Teneriffe asking for observations to be made there in December, 1890, and April, 1891, which would be propitious times for them. From these observations, and others simultaneously made in the sandy plains round Berlin, it was established that the earth rises and falls like the ocean and the atmosphere. The movements, common to them all, may be likened to that of the chest in breathing.—Paris correspondent, "Weekly Despatch."

To the above question we reply, Yes! certainly. *Parallax*, in his excellent work, entitled *Earth not a Globe*, shows that the tides are caused by the rythmical rising and falling of the earth as it rests upon the sea, and not by any alteration in the absolute height of the water. This explanation was so simple that the scientists scoffed at it; but now after an acknowledged "scientist" has discovered what was already known to *Zetetics* it is called "A surprising Scientific Discovery." It is surprising!

### SCRAPS AND REVIEWS.

We have received a leaflet from Nottingham, headed *Science Truth*. It gives a picture of the earth as a globe, with the sun and moon on opposite sides of it, and the moon at *new-moon*! It says that Professor Huxley confirms the Bible, word for word! If this is the kind of stuff on which to feed Y.M.C.A., no wonder that much of modern religion is as "flabby" as a good deal of modern "science."

*The Christian World* is ostensibly published in the interest of Christian doctrine, yet the issue for June 14th contains a paper headed "The Flood Myth." This of course is written, and preached, by a gentleman who dubs himself "Rev." But what reverence can Christians give to

men who, while they are found in sheep's clothing—and often the very best wool—are doing their utmost to undermine the authority of the Holy Scriptures? If space permit we hope to criticise more fully this so-called divine.

### A MODERN PHILOSOPHER.

(A REVIEW).

We learn that MR. H. BERKELEY SCORE, F.R.G.S., F.R.Hist.S., Lathom Park, Ormskirk, Lancashire, is intending shortly to bring out by subscription an original work containing 160 New Fables in Prose, under the title of "Sparks of Light from a Fabulist's Diamond Mine." Some of the fables have already been published in *The Muses*, *The Weekly Irish Times*, *Asia*, *Chatterbox*, &c., and have become very popular. The subscription price is half-a-crown. Such a book ought to command a large sale, seeing that we are now a-days, like the Athenians of old, always on the look out for 'something new.' Anyone may become a subscriber, and a complete list of the names sent in to the author will be printed at the end of the volume.—Those of the "fables" we have read are really good; and they contain some telling strokes against modern shams and hypocrisy. *Zetetics* will be interested to learn that this clear and original writer has now the courage to examine into the merits of plane geography. We are to hear what he thinks about it in the Christmas number of *The Muses*, (9d) of which he is the editor.

### MODERN "SCIENCE."

A friend sends us a remarkable book by Mr. Laing on "Modern Science and Modern Thought;" and he wants to know what we think about it. We are sorry we cannot speak in praise of this work. Briefly; if modern "science," and especially astronomy, were true this book would be the most telling attack on Bible Cosmogony we have ever read. But the writer *assumes* the earth is a globe, evolved as the scientists teach; and, as we know it is not, his premises being unsound, his conclusions are fallacious. But while Mr. Pember, Professor Drummond, or F. Hugh Capron, support the evolutionary and globular theory they will never be able to cope successfully with so-called science. Instead of vainly trying to reconcile a false "Science" with the Bible, we ought to *attack* the Science, or at least to call it into question; for as Mr. Laing well says; "The *two statements cannot both be true.*" But he makes the illogical mistake, common to most writers who attack the Scriptures, of first assuming that "Science" is infallible, and then he innocently draws conclusions adverse to the Inspiration of the Holy Scriptures. But he should first prove the globular theory true. Let him try. ED. E.R.



## AN "EDUCATIONAL" IDYLL.

Ram it in, cram it in—children's heads are hollow !  
 Slam it in, jam it in, still there's more to follow ;  
 The Schoolmen's Globe, sham-History and Gravitation's mystery,  
 Evolution's-ology, Algebra and Conchology,  
 Botany, Astronomy, Latin, Greek, Geometry,  
 Ram it in, cram it in, children's heads are hollow !

Rap it in, tap it in—what are teachers paid for ?  
 Bang it in, slap it in—what were children made for ?  
 Ancient Archæology, Aryan Philology,  
 Prosody, Zoology, Physics, Clinictology,  
 Calculus, Mathematics, Rhetoric and Hydrostatics,  
 Hoax it in, coax it in, children's heads are hollow !

Rub it in, club it in, *all that's known as Learning* ;  
 Punch it in, crunch it in, quench their childish yearning  
 For the field and grassy nook, ocean grand and rippling brook ;  
 Drive each trivial thought afar ! teach the children that they are  
 But machines to cram it in, and slam it in, for their heads are hollow !

Scold it in and mould it in, *Globe and all to swallow* ;  
 Fold it in and hold it in, still there's more to follow !  
 Faces pinched and sad and pale, tell the same unvarnished tale—  
 Tell of hours robbed from sleep, teachers wearied, studies deep,  
 Those who've passed the furnace through with despair can tell to you  
 How the teacher crammed it in, rammed it in and jammed it in,  
 Crunched it in, and punched it in, rubbed in in and dubbed it in,  
 Pressed it in, caressed it in, rapped it in and slapped it in,  
 When their heads were hollow !

From the "OHIO RAPIER."

"The weather of late has been very fine. It was a splendid sight, on Sunday evening, to see the land in Ayr, and Cumberland, so clear that houses could be seen with the naked eye ; and the smoke from Whitehaven, and other towns, could be seen very distinctly. Ramsey bay appeared as if it was enclosed by the surrounding land, from Black Coombe to the Point of Ayr, Welney light being seen distinctly, distance 45 miles."—*Extract from the "Manx Sun," July 24th, 1884.*

"I had been told so often that the Bible was no authority on scientific questions, that I was lulled almost into a state of lethargy."

"If it shall turn out that Joshua was superior to Laplace, that Moses knew more about geology than Humbolt, that Job as a scientist was the superior of Kepler, that Isaiah knew more than Copernicus . . . then I will admit that infidelity must become speechless for ever." Ingersoll's Tilt with Talmage.

## CORRESPONDENCE.

*Letters intended for publication in the "The Earth Review" must be legibly written on one side only of the paper, and must have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. Short pointed letters or articles preferred.*

*The Editor cannot, of course, be held responsible for the various opinions of his correspondents ; nor can he enter into correspondence respecting articles, &c, held over or declined.*

*Letters must be prepaid, and addressed "ZETETES,"  
 Editor of The Earth-not-a-Globe Review, Plutus House,  
 St. Saviour's Road, Leicester, England.*

## NOTES.

Many articles are crowded out for lack of space.

*A.E.L. Rellam* asks, How do they calculate the supposed dip of the Earth ? The rule is, Square the distance (in miles) and multiply by 8 inches. Thus for six miles the dip would be  $6 \times 6$  equals 36  $\times$  8 equals 288 in. or 24 ft.

*W. Lambert*.—"Parallax," in his book, does not give the circle of light to which you refer any specified dimensions. He uses it merely to shew how the day is divided from the night by the motion of the sun round the earth.

*J. Casse*.—We have no more sympathy with spiritism, or what is commonly called "spiritualism," than you have. As *Zetetics*, or Truth Seekers, we cannot deny the facts which have come under our notice ; but these facts point to an agency which is from below rather than from above. You had better write to the author of the O.H.P.

*E. Breach*.—We are glad to see you and others are publicly defending the Plane truth in the columns of *Chat*, and elsewhere. Other friends are doing a like service for the truth at Lincoln, London, and other places. Go on, and prosper ; but whether men believe us or not, our testimony is becoming a remarkable witness for God's truth in these last days.

*W. M. Herd, Battle Creek*.—You must have written your letter before seeing the article in the July E.R. headed "Our Critics." As you say ; "Satan, the father of lies, has reduced the art of deception to a science, and he is at the bottom of the globular theory, which he has provided with hooks and eyes that fit in marvellously with some phenomena." Nevertheless, we reply, we must not yield to mere astronomical theories and coincidences as though they were facts. Our space forbids us printing for the Astronomers.

## Letters to the Editor.

60, Bank road, Liverpool,  
Dear "Zetetes,"

Can you or any of your many readers, and especially any of your opponents, inform me where all the water that forms the sea came from if this earth was shot out of the sun as a red-hot cinder some thousands or millions of years ago,—and how is it that there is more water than cinder?

Yours truly,

J. SMITH.

You ought to ask the Astronomers this question. ED.

30, Upper Coombe Street,  
Croyden, Surrey,  
22nd August, 1893.

Dear Sir,—I have been interested in the study of Plane Geography for some years, having had the pleasure of hearing "Parallax" lecture at Croydon, and was impressed forcibly with his statements.

I feel very glad that you have started a magazine call "The Earth Review," No. 2 April number was sent to me; but allow me to draw your attention to page 12 where you say, "If our correspondent thinks he can overthrow Dr. Birley's proofs, &c. alluding to Parallax, the author of the book called "Earth, not a Globe," a copy of which I have by me.

I would say that the name of the author was Dr. Samuel Rowbotham, not Dr. Birley, this I think ought to be corrected.

Some time ago, I visited his grave at the Crystal Palace District Cemetery, where there is a handsome memorial to him, and from which I copied the following lines;—

SAMUEL ROWBOTHAM, M.D. Ph.D.  
(Parallax)

Founder of Zetetic Philosophy,  
Died suddenly, Dec. the 23rd, 1884.  
"The deepest truths with reason keen  
Thy logic could uphold  
Thy master mind with science fought,  
Those truths but to unfold,  
In ages yet to come Mankind  
Will glorify thy name,  
And none will shine with brighter rays  
Upon the scroll of fame." WEST.

I wish you success in your important undertaking in these days of popular education. What a grand thing it would be to teach the young, the true system concerning the earth and sea in the various schools throughout the land.

With kind regards, I am, dear Sir,  
Yours truly,

THOMAS WHITTLE.

P.S.—I like your pamphlet on the Midnight Sun.

Tuakau, Lower Waikato,  
Auckland, N.Z.

Dear Sir,—I duly received your parcels all safely and am much pleased with their contents, also glad to hear the remittance arrived safely. Your "Satire" is a most remarkable production, and I think it ought to make people stop and think before they swallow down all that is being taught. It is most enjoyable reading. People are very shy at purchasing the literature, excepting the "Satires," so I have spread the pamphlets up and down at my own expense. As times are rather dull just now, I find it very hard to meet these extra expenses, much as I would like. I am sorry to hear that your health is not good. I hope you may be long spared to wield the pen in the cause of God and truth. I hope that the S.D.A. Church in England will make you some restitution, eventually, for what you have suffered for the truth of God's Creation.

I like your "Midnight Sun" pamphlet, and I thoroughly understand the arguments deduced from it. It seems a very clear case. I will now try to answer your queries respecting the stars. The Southern Cross and all other constellations do most certainly appear to revolve around a southern point or centre. I have proved this beyond a doubt by close observation, but there is no distinct star for the centre, but many very indistinct ones all about the centre. The Magellanic clouds (2) are both inside the Southern Cross orbit and revolve exactly the same direction and half revolution in the twelve hours. When I say the Cross does not set, I do not mean it does not rise, for when you face the S. you see it rising from the lower part of its apparent orbit and travelling from E. to W. as per diagram.

(Diagram omitted). We are now approaching the shortest day here, Sun rises to us E.N.E. sets W.N.W., longest day Sun rises E.S.E. setting W.S.W. The Sun is always seen to Northward at 12 o'clock Summer and Winter, rising to very low altitude at 12 o'clock, now June 17th, 1893, from E. to W. and Midsummer rising to very high altitude and throwing very little shadow.

(A later letter from the same writer).

July 11th, 1893.

Dear Sir,—I made up my mind shortly after writing my last letter, that I would try to get you a Shadow course on our shortest day, June 22nd, but we were having such cloudy and wet weather that it was impossible, but however by the 26th it broke a clear day comparatively speaking, so I erected a level stand about 4 ft. 6 in. above earth and spread my paper and fastened it flat and level. . . . I have preserved a copy myself and sent you one on tracing paper so you can re-produce it, and if I am preserved in health I intend (D.V.) taking one on our longest day, or as near to it as possible, and compare the two. I took the bearings of sun rise and setting with a pocket compass a very small one, so I may not be very correct on that point. It rises in the E.N.E. quarter setting in the W.N.W. quarter. I am not speaking exactly now (but thereabouts) and I do not think it rises in the sky by noon to an elevation of *certainly not more* than 30° this 11th day of July. He makes very low arc in sky at midwinter, and an almost overhead arc by midsummer. An observer facing south now (midwinter) to see the sun rise would have to face half round to see it to N. side of E., while at midsummer the observer would, still facing S. see the sun rise without shifting his body by merely turning his eyes to the quarter, as it seems to rise then with the observer inside the circle, but by noon you can plainly see that it has got to the N of overhead point and that you are then outside the circle, and same at setting. For midsummer it appears to set considerably to S. of W. so when facing due S. by turning your eyes you may see it go down or out of vision. I also send you Moon's shadow record three days after I took Sun's, it being full moon. I might say I was rather disappointed with the curves, as I expected

them to be parts of a correct circle, but they are peculiar curves, but perhaps that is owing to light not travelling in straight lines, (yes, partly, Ed.) I was much interested in the correspondence of C.H. in April E.R. and Mr. Runci-man whom he quotes is perfectly correct, the Southern Cross does not set in N.Z., but is always to be seen for the entire circle, or orbit it makes, it is situated near the end of the Milky Way, and that strange belt of light seems like a convolute curve across the heavens with its commencement in the centre round which the Southern Cross revolves. The long end appears to swing round the sky from E. to W. but at the S. end it moves very slow. Orion's belt appears to me to keep a steady mean course in the sky as it moves along due E. and W., it never appears to get one side or other of E. or W.

I forgot to tell you when I took the moon's shadow it rose, I think, more to S. of E. than the sun does at midsummer and sets ditto of W.

I was gratified by your remarks on the letter of Caldwell Harpur, in April E.R. to see how lightly you treated motion of stars *versus* shape of the earth, for I have stood of a starlight evening and wondered why those different S. constellations do not travel around the great S. circumferences instead of revolving around an apparent centre or point. This point would, roughly speaking, be at about 45° to us.

I see some stars just outside the orbit of the Southern Cross which set on the W. side of the S. Cross and rise again after an interval of 3 or 4 hours on the E. side of S., having gone just below the line of hills that border my horizon.

The Cross never sets and is always in view Summer and Winter, rising to a very high altitude then dipping to about 8 deg. of the horizon at the other side of its orbit. Its circle seems to narrow in winter and expand in summer. I think our Government in the South here should undertake the task of proving the lengths of degrees of latitude to find whether they do increase as they move south.

I should like some explanation of the following:—If 15° of 45 miles long, North of E. equals 1 hour of time, why does 15° of 60 miles long South of E. equal the same hour of time? (Answer. Because the light of the sun travels

faster in some places than the sun itself. The sun goes round the earth once in a day, say at the equator, but its *light* has to travel around the whole southern circumference in the same time. ED.)

I have lent out copies of your "Midnight Sun," and it is well-liked here. It is very interesting and easy to understand.

Please thank Mr. Williams for half-a-dozen copies of the E. R. which I have distributed. If prospects brighten here, I hope shortly to become a member of the U.Z.S.

Yours in truth,  
GEORGE REVELL.

[Thanks for tracings of Shadows. If our means allowed we would print them. But go on collecting *facts* carefully and record them accurately. ED.]

Portsmouth.

Dear Sir,—I just drop a line to inform you that I am profitably delighted with our "Quarterly Zetetic." I hope its propaganda will spread and enable you to produce it monthly. I wish I could afford to purchase copies for loaning and free distribution as I am sure it will ultimately break down the present assumptive stereotyped un-founded dogmas of Science (?) What was said by Sir Astley Cooper, after 50 years of the Science (?) of Medicine may be also said of Modern Astronomy that it—(Science of Medicine) was founded on conjecture! and improved by murder!!—killing by Doctors is of course no murder, so with Astronomy, it is founded on conjecture and improved by the destruction of faith and the loss of souls. I am enclosing a letter which I

should like to see in our next issue as I think it is a good point in favour of—

"Truth crushed to earth will rise again  
"The eternal years of God are hers;  
"While Error wounded writhes in pain  
"And dies among her worshippers.

If you have any spare copies for *free distribution* of our Quarterly or other papers I shall be glad to help on the work of faith and labour of love you so ardently contend for.

Yours fraternally,  
S. T. BOLT.

[Will any friend of Truth kindly help us to send literature for free distribution? ED.]

#### A COMPASS PROOF.

Sir,—One of a number of proofs that the Bible is the Word of God is the fact that no other book in the World can be translated into so many different languages, and lose so little of its native beauty and force. This fact indicates that it was written for *all* the human family in all places and throughout all time. So we may equally say that with regard to the truth of the World being a vast plane, and not a Globe, we have amongst numerous other proofs the fact that a ship sailing on every known sea the mariner's compass is not only an essential help, but it is a positive necessity. It points North and South, but if the world was a globe of what use would the compass be? None! for if a vessel was, say 50° degrees S. the compass could not possibly point to the North Pole! and where would it point to if the ship was "on the line"? Echo answers, where? Let your readers try it, Sir, on a pasteboard globe, and see for themselves.

JOHN WILLIAMS.

## ENQUIRY ABROAD.

### ASTRONOMY AND THE BIBLE AT VARIANCE—WHICH IS RIGHT?

A lecture on the above subject was delivered on Monday night, at Monk's road Chapel, by Mr. Albert Smith, of Leicester, an advocate of what is termed the modern Zetetic School of Philosophy. The lecture was well attended, and was delivered with great skill and energy, the arguments being set forth in a calm and dispassionate manner, the lecturer proving himself to be thoroughly acquainted with the subject in all its bearings. He appeared to be gifted with good debating power,

for his style of delivery was simple and unaffected, and at once placed him in sympathy with his audience. The lecturer commenced by referring to the great battle now being waged between religious and scientific men, the former advocating the truth of the Scriptures, the latter believing in a philosophy directly antagonistic to the plain statements and evidences contained in the same. He pointed out the marvellous fact that in every serious encounter between the two opposing forces it was the defenders of the Scriptures who generally gave way; and that it was to popular science biblical statements of facts were made to conform. Instead of scientific theories bending to bible records, these in every conceived form, were turned and twisted, or altogether denied (as in the case of the "Higher Criticism") to suit the exigencies of modern theories. He proposed to vary the situation, and carry the war into the enemy's camp. Accepting the Bible as true, he would question and test that "Science" which was so directly antagonistic to the Divine records. He contended that the Copernican and Newtonian system of philosophy was radically wrong; that at the best it was no more than what its founders claimed for it, a theoretical system based upon mere suppositions, and devoid of one single fact upon which the gigantic and elaborate superstructure was built. Referring then to his diagrams, of which he had a plentiful supply, the lecturer proceeded to explain the Zetetic process of reasoning, claiming that it was based solely upon experimental data, absolute fact, and undeniable proof. He then proceeded to demolish the globular theory of the earth's form and the orbital and axial motions involved. He claimed that by actual experiment it was proved beyond doubt that the earth is a flat, extended, circular plane, stretched out in all directions away from the central north, until bounded by the unexplored and unapproachable ice barriers of the Antarctic regions. The lecturer held that the land rests upon the waters, as the Scriptures assert, and that instead of the earth moving through space, the sun and the moon do actually travel as they appear to do, over the earth; that the heavenly bodies are small, compared with the earth, are but a short distance away from it, and were made subsequent to light itself, and solely to light this world; and that the common belief with its supposed infinity of inhabited worlds is a monstrous dogma, contrary to the Bible and Nature, and the great stronghold of the infidel. Various phenomena, as tides, eclipses, &c., were explained on very simple lines, and the whole argument appeared to be forcible and striking in the extreme, and of sufficient force to demand an answer from the advocates of the popular theory.—From the "Lincolnshire Chronicle," July, 8, 1893.

### THE FLAT EARTH.

Mr. Ebenezer Breach, of Portsmouth, who is a warm advocate of the theory zealously propagated years ago by a lecturer who took the *pseudo-*

*nym* of "Parallax," has tackled the Astronomer-Royal on the subject. Addressing this high official some months ago in a letter covering four closely-written foolscap pages, Mr. Breach set forth the history of his conversion to the theory and the arguments which won him over, these latter, broadly summed up, having led him to the conclusion that the earth is flat and immovable, and is the centre of the universe. In conclusion the writer appealed "in the name of an Englishman, for a kind candid, and common-sense reply," in the interests of truth. No reply whatever having been received, Mr. Breach, by a very simple process of reasoning, has arrived at the conclusion that, inasmuch as his arguments have not been answered, they are unanswerable.—*From the "Evening News," Portsmouth, July, 15th.*

MR. SKELLAM we hear lately gave a lecture in London, from which good results are expected.

THE EDITOR also gave an address at Ashton-u-Lyne, on Modern Astronomy false, as proved by Nature, Facts, and the Bible. Discussion was challenged, and many questions were asked and answered. There is enquiry abroad, and thus the light of Truth is kept shining.

#### AN IMPORTANT SUGGESTION.

It has several times been proved by experiment that the surface of a canal six miles long is perfectly horizontal and that therefore, the earth is a plane. There is another experiment, however, as important as the above which has never been made. It is the measurement of a degree south of the equator.

If the earth is a globe the degrees of longitude south of the equator will be less and less as the south pole is approached; but, if the earth is a plane, the degrees of longitude south of the equator will increase in size as their distance from the equator increases.

Now "Parallax," in page 253, gives a very simple method for measuring a degree south of the equator. He says that if a space on the earth is measured over which the sun travels in four minutes, this will be the length of a degree; and as there are three hundred and sixty degrees in a circumference, three hundred and sixty times the length of this space will be the distance round the earth at the latitude where the experiment is made. This would, at once, tell us if the degrees lengthen or shorten south of the equator.

We say the degrees lengthen, and if the experiment should prove that we are right, then the difficulties respecting the duration of sunlight and other phenomena in those regions would be cleared up; or if the facts could not be explained, we should know that it was only because we were short of information, and we could patiently wait for more light.

Now, Sir, are any of your readers acquainted with someone who might be asked or employed to undertake the above experiment either in Australia or New Zealand? If no one could be found to take the trouble out of love for the truth, could a fund be raised for the purpose?

This is a very important matter. Opponents would be completely silenced if the result should be according to our expectations.

WILLIAM BATHGATE.

September 7th 1893.

#### "BRITISH BOGRAFY."

SIR ISAK NEWTON.

"This grate man were born at Woolsthorp in Linkonshire, on 1642. He were a grate nateral feloserfer I dont no wat nateral felosefy is, but he were the creater of it. He were also an astronmer. He were a cheerful and amerable dispershon, and wore is hare long. He is said to ave maid grate diskoverys in astronmermy an things. This was mostly by axerdent thow as will be seen later on. He used to spend a deal of time a studyin the stars an moon with a spy glass, stopin out on the roof hole nites to gether. I rekon he were mostly asleep thow. I have piktard im a serchin the evens on the tiles akordin to the bografys I ave red, a sweepin the stary speer with a long andled spy glass. (Cuts omitted). Isak mite a studied astronmermy till his teeth fel out only for an axerdent, which were as follers. He were one day sitin in the garden under a tree makein belief to study. This was a common abit of is, bein a good excuse to go sleep. He was in this knondishon on the day alluded to as ushal tho avin a book with im. It were at this moment that a appel fel on is ed. He was sitin on the gras with flours growin round im fast asleep. Of coarse this woke him up and he made out to wonder wat made the appel fall on is ed an not fly up in the air. He then pertended to diskover that all objekts was atraktet to the erth by gravetation and set up as a felosofer on the strength of is diskovery. That was jest like Ikes stile. *He jest said wat sooted is perpose* an never sed nothin about smoke and bubbles an steem an berloons witch goes up in the air every time. Also coten wool, thiseldoun, leeves an ceterer, witch does jest as it appens. People were so astonished at sleepy Ike findin out at appels fel down and didnt fly up that they rased more noise than were nesesity. Isak died in 1727 at the age of 85. That is neerly 300 yeers ago an people stil owls about is diskovery altho not one in a 100 nose wat it were as he pertended to ave diskovered. The reel reeson of all this fus is not ard to find out in my umble opinyon. It was owin to Ike beein a barrownite." From "*The Insect.*"

### “ THAT WAGER ! ”

To the Editor of the “ Future.” (DECLINED).

Sir,—In your journal for April, I find the following demand from “ Enquirer,”—“ *I call again for the facts of that experiment,*” [Wallace’s Experiment on the Bedford Level]. Don’t you think, Sir, that Alfred Russel Wallace would be the man to ask for these facts? But the truth is, he does not dare to say a word about them, and never *has* dared to publish anything relating to them. And, like the man in the backwoods who never saw the deep blue sea in his life—nothing but sky and woods—“ Enquirer ” persistently cries—“ Show me the ocean ! It has been carefully kept back ” ! Well, we have printed for 23 years concerning the “ ocean ” which “ Enquirer ” is so anxious to see, let us bring it home to him ; and, if his cabin be swamped, he will have but himself to blame ! One thing, however, is strange ; that, while he calls for the “ Ocean,” in evidence, he knows *all about it* !—and has obtained his information from those of whom he demands it ! We did not fix the date of “ Enquirer’s ” birth, or we would have had it occur 20 years sooner, so that he might have been “ in the swim,” instead of out of it.

In 1871, the writer of this letter printed a pamphlet of 32 pages, with diagrams, “ Water Not Convex,” &c., “ demonstrated by Alfred Russell Wallace,” &c. These 32 pages give the whole particulars even to a verbatim report of the discussion with Dr. Coulcher, referee for Mr. Wallace. In 1875, “ Wallace’s Wonderful Water ” was published by the same author, 18 pages ; and, in the same year, “ Proctor’s Planet’ Earth,” in which were strong charges against Mr. Wallace ; and, to say nothing of extensive newspaper correspondence, we come to the “ One Hundred Proofs, in 1885 and subsequently, in which the *prime* facts will be found ! All this time, the supposed *winner* of the wager has been silent—yet we are charged with *carefully keeping back* evidence ; which simply means that we are playing the fraud !

Now, Sir, we have brought the “ Ocean ” to “ Enquirer’s ” very door, and ask him if he sees it *now* !

WILLIAM CARPENTER.

Baltimore, Maryland, U.S.A.  
April 25th 1893.

P.S.—Would it be right, or wrong, to say that *Alfred Russel Wallace* has “ carefully kept back ” *everything* ? W.C.

### PLANE GEOGRAPHY.

The sea level in all directions, extending to an unknown distance.

North, the centre, and south all around unexplored, therefore unknown regions beyond about 78° south of the equator where an

immense wall of ice, and an inhospitable climate render it unfit for man to inhabit, it being far away from the light and heat of the sun.

East, West and South are not fixed points but relative directions or terms, proved to be so by the magnetic needle which always points in one direction to the north or centre, but the direction of the south end is various all around the north centre.

The sun’s circuit is over the sea, and land called “ earth,” and its daily course is either northward or southward gradually decreasing in dimension of diameter until it reaches the tropic of Cancer 21st June, over the equator in the equinoctial circuit 21st March, and 23rd Sept., when the sun enters Aries and Libra ; and furthest away southward 22nd December, the winter solstice. This accounts for our short days and long nights in England in winter ; but in Australia and New Zealand, the seasons are the reverse of what they are to us. The winter there is in June, and the summer in December when the sun is in the sign of Capricorn.

The sun being far away from England in December, accounts for the altitude at noon to us, being so low as 15° above the horizon.

In my opinion there is much ignorance about the situation of the various signs in the Zodiac. I think the Zodiac extends 47°, equal to the Torrid Zone, and not merely 8° each side of what is called the “ ecliptic.”

THOMAS WHITTLE.

### A PIONEER ZETETIC.

“ We think our fathers wrong so wise we grow,  
No doubt our wiser sons will think us so.”

Perhaps after all we of this present day of enlightenment would do well to learn a few lessons from the teachers of the days of the far away past. With this in view we would call your attention to one of the early seekers after truth.

The name of this personage was Cosmos, surnamed “Indico pleustes” (Indian traveller) so called because of his many Indian voyages. He was a native of Egypt, and was born probably at Alexandria about the fifth century. In early life he was a merchant, but subsequently he settled down and adopted the more sedentary life of a monk. It was during his monastic life that he wrote his varied works on geography and astronomy. His geographical writings reveal to us his remarkable voyages and the familiarity he manifests with the various lands and seas throughout which he had travelled, gives to his writings an air of vivid reality. It is said of him that he was no retailer of traveller’s wonders, but that later researches have confirmed the veracity of his statements.

Strange to say that those who accept his geographical accounts as being credible, reject his astronomical writings as being fanciful and absurd. With the exception of one work ("Christian Topography") all his writings are lost. The work still extant consists of twelve books belonging to the Vatican M.S.S. The first six books are dedicated to his friend Pamphilus who had urged him to attempt the work, a task from which *he* shrank on account of his literary inability. The first book was written in 547 A.D., and the others during the following thirteen years.

The subjects of the twelve books are:—

- 1.—Against those who claim to be Christians and who assert with the pagans that the earth is spherical.
- 2.—The Christian hypothesis as to the position and figure of the Universe proved from the Scriptures.
- 3.—The agreement on these points of the Old and New Testament.
- 4.—A brief recapitulation and a description of the figure of the universe according to the Scriptures and a computation of the sphere.
- 5.—Agreements of prophets and apostles concerning the above.
- 6.—The magnitude of the Sun.
- 7.—Duration of the heavens.
- 8.—Hezekiah's song and the retrogression of the Sun.
- 9.—The course of the Heavens.
- 10.—Testimonies of the Fathers.
- 11.—Geographical account of the known world.
- 12.—Testimonies of heathen writers to the antiquity of the Scriptures.

The chief design of the writer is to confute the impious heresy of those who suggested that the earth is a globe and not a flat oblong table as represented in the Scriptures. We must be prepared to find a few discrepancies in his account, but at the same time we should remember the disadvantages under which this defender of the truth laboured. He says the whole area of the earth is surrounded by a kind of lofty walls, beyond which the Paradise of our first parents is situated. Here men lived until the Deluge; when Noah and his family crossed the intervening flood in the Ark and peopled the present world.

The changes of day and night were thought to be caused by a mountain of enormous bulk, rising at the extremity of the oblong area. Behind this the Sun was thought to pass in the evening and re-appear on the other side in the morning. The conical shape of the mountain produced the variations in the length of the night, as the sun rose higher above, or sank down towards the level of the earth. Eclipses were due to the same cause. The round shadow on the moon's disc being cast by the domical summit of this huge mountain. The views thus propounded by Cosmos were those generally entertained by the "Fathers" of the Church. Their chief argument was the Scriptures. Upon these they pinned their faith, deducing from them a system which had for

them the authority of divine revelation. Cosmos supports his theory with passages of Scripture, and the comments of the early Fathers. Other arguments are drawn from Reason and the nature of the case. For instance, the absurdity of the supposition of the antipodean regions, inasmuch as the beings on the other side of the world must drop off, and the rain must fall upwards instead of downwards. He ridiculed the supposed rotatory motion of the Universe, disproving it by saying that the repose of the blessed in Heaven would be disturbed by their being rolled through space. In some of his writings he is indignant with those professed Christians who had followed what he calls "the false lights of science."

"Men who assume the name of Christians and yet in contempt of the Holy Scriptures join with the Pagans in asserting that the heavens are spherical. Such assertions are among the weapons hurled at the Church. Inflamed by pride as if they were wiser than others, they profess to explain the movement of the heavens by geometrical and astronomical calculations."—*Communicated by Mr. Perry, Ashton.*

We should be glad to hear more on this subject of ancient astronomical beliefs.  
ED.

### "SCIENTIFIC" FALSEHOODS.

At school in our unsuspecting childhood we were taught three great falsehoods as truth, and to-day our children are taught the same. First falsehood, "the World is a globe; round like an orange." Second falsehood, "it rotates on its axis." Third falsehood, "it revolves in an orbit round the sun." Now it is not universally known that besides these two primary motions there are said to be five others, so that the globe of modern astronomy has *seven motions!* But we are told, "there are no sensible effects of any of these motions!" But we dare for the truth sake tell these Astronomers that when sentient beings are tossed and tumbled about in seven different directions at one and the same time, there must be "sensible effects" felt by them. No! say modern astronomers, you must throw your senses to the winds, for those motions "are only appreciable to astronomers." Happy innocency! What next? Let us look at these seven movements in detail. (1), "Rotary motion producing day and night." (2), "Orbicular motion round the sun annually." (3), "Fulcrum motion, by some *supposed* to account for the tides." (4), "Motion of the aphelion and perihelion points round the ecliptic." (5), "Progressive diminution of the angle of the earth." (6), "Precession of the equinoxes." (7), "Nutation to and fro of the earth's axis." How long is England going to pay men for these falsehoods? John Bull ought not to be ignorant that they are falsehoods, for his standing orders in the House of Lords and Commons proves incontestably that it is known. It is there declared that "a datum horizontal line, which shall be the same throughout the whole length of



the work, or any branch thereof," shall be used, both in cutting Canals and making Railways. What would have been the use of "a datum horizontal line" in the cutting of the Manchester Ship Canal? We affirm that it would not have been any use whatever, for if the World is a Globe, with a rate of curvature of 8 inches to the mile, multiplied by the square of the distance in miles, one end of that Canal should be, the Canal being over 35 miles long, *800 feet below the other end.* But a datum horizontal line was used and consequently the World is proved to be a vast irregular and motionless plane, and the waters by which it is surrounded horizontal also at their surface. Let those who believe that it is the custom of surveyors to make allowance for earth-curvature ponder over the following from:—

"*The Manchester Ship Canal Co.,*"

Engineer's Office, Manchester, February 19th, 1892.

Dear Sir,—It is customary in Railway and Canal constructions for all levels to be referred to a datum which is nominally horizontal, and which is so shewn on all sections. It is not the practice in laying out Public Works to make allowance for the curvature of the earth.—Yours faithfully, W.H.H.

Again, another authority writes;—"As an Engineer of many years experience, I say that this absurd allowance is only permitted in school books. No Engineer would dream of allowing anything of the kind. I have projected many miles of railways, and many more of canals, and the allowance has not even been thought of, much less allowed for. This allowance for curvature means this—that it is 8 inches for the first mile of a canal, and increasing at the ratio by the square of the distance in miles; thus a small navigable canal for boats, say 30 miles long, will have, by the above rule, an allowance for curvature of 600 feet! Think of that, and then please credit engineers as not being quite such fools. Nothing of the sort is allowed. I must, however, state that college astronomers have made the student engineer to think that in his method of levelling what is known as the 'backsight' cancels any curvature by his 'foresight' and so on. It is only a theory, and if astronomers declare that our method of levelling cancels the obligation of making this allowance, we shan't quarrel with them—it does no damage to our projects when we get into practice, but we no more think of allowing 600 feet for a length of 30 miles of railway or canal, than of wasting our time trying to square the circle."—W. WINCKLER, C.E. Here then we have *practical evidence* that falsehoods are taught through astronomical theories to our children at school. Here we have *practical* testimony that the World is not a Globe, and consequently has neither Rotary, Orbicular, or any other head-over-heels tumbling motion. Here we have *practical evidence* that the teaching of modern astronomy is mere theory and utterly false to Nature in every conceivable way possible. And yet the teaching of this so-called "most exact of the sciences," is one of the strongest evidences Secularism has to "prove the Bible a myth!" Ah! Ah!

HOTTENTOT

(To be continued).

# THE EARTH—NOT A GLOBE—REVIEW.

'To Him that stretched out the Earth above the Waters; for His mercy endureth for ever.'—Psa. 136 : 6.

No. 5.

JANUARY, 1894.

PRICE 2D.

## THE SUN STANDING STILL.

IF any proof were needed that the Bible teaches the doctrine of a stationary earth and a moving sun and moon, it is given in the tenth chapter of the book of Joshua. Here it is recounted how Joshua, the leader of the Israelites after the death of Moses, and the armies of Israel fought against the five kings of the Amorites and their armies, the LORD also casting great hailstones down from heaven upon the enemies of His chosen people. "Then spake Joshua to the LORD in the day when the LORD delivered up the Amorites before the children of Israel, and said in the sight of Israel;—

Sun, stand thou still upon Gibeon; and thou Moon, in the valley of Aijalon.

And the sun stood still, and the moon stayed, until the nation had avenged themselves of their enemies." *Rev. Ver.*

Now although this account is evidently quite as historical as the account of the rest of the Israel's doings and battles, yet because the teaching conflicts with the views of men and the theories of modern astronomers it is tortured and twisted by laboured "explanations" to mean anything and everything but what the words naturally mean on the face of them. And, as though to prove that all these fanciful "explanations" are off the track, no two expositors are perfectly agreed, or give exactly the same explanation of the passage. They are only alike in one laudable but misguided intent, and this is, to save the Scriptures from reproach and to "harmonize" the account with the theories of modern astronomy and the views of so-called "scientists." It never seems to enter the minds of these well-meaning expositors to question the truth of this modern "science," but only how most plausibly to "reconcile" with it ancient and Biblical Cosmogony. This is not as it ought to be. We shall make no such futile attempt, neither shall we pause to vindicate the character of Israel's God, who will, we believe, do this Himself perfectly when the day of final judgment arrives; but we shall proceed to shew the unsatisfactory nature of all attempts at reconciling



the Bible with modern astronomical theories, and boldly challenge any man, either scientist or sceptic, to give us one reasonable and practical proof that the earth has any of the awful motions attributed to it by them. If they cannot do this, and we have hitherto asked for the proof in vain, then we have both right and reason to believe that Joshua was correct in believing, with other Bible worthies, that the motion of the sun, and not of the earth, was and is, the cause of day and night.

The latest effort we have seen at impossible reconciliation calls forth these remarks. We give the writer credit for sincerity and devotion. As he has sent us a copy of his pamphlet we thank him for it, but he must excuse us pointing out clearly and conscientiously where his effort, like that of others has failed. His pamphlet is entitled "Joshua commanding the Sun to stand still. The miracle explained and defended. A lecture by the Rev. W. W. Howard, price 3d., to be obtained from the author, 47, Heman's street, Liverpool,"

We cordially agree with the opening paragraph ;—

"The subject we have to discuss to-night has engaged great attention for ages. Believers in revelation have explained and defended the wonderful occurrence with great learning, zeal, and ingenuity, and infidels have made it the favourite object of their scorn and raillery. Many theories have been advanced with a view to give satisfaction to faith and remove doubt; and the way in which the event is still regarded to-day, both among believers and unbelievers shews that not any of them have met with much success."

This is quite true, especially the closing sentence; and we think the present effort is doomed to like failure with former efforts. And for the same reason, viz; lack of faith, on the part of "believers in revelation" in not receiving the account as it stands, and ignorance of true science on the part of infidels, and others, who unreasonably revile what they do not understand, and who credulously believe any absurd theory if propounded in learned jargon and uttered in the name of "Science." Thus the "Christian" has generally much too little faith in the All-wise God and His Revelation to believe it, so he explains it away; and the infidel has a great deal too much faith in ever erring mortals and their philosophy, so he proudly scorns and rejects it. But, of the two, the infidel is the more consistent; for the Christian expositor, like himself, unquestionably accepts those astronomical theories which makes the Word of God of none effect, while the sceptic does not believe in a Divine Revelation. But Zetetics can boldly challenge the truth of those theories, yea, more, they can shew that even as theories they are false to Nature, as well as to the Scriptures; and so the infidel's raillery is checked—and in all reason it ought to be—until he becomes sufficiently instructed to offer some decent proof in support of his position.

Let him try, for instance, to give proof of the earth's supposed motion; as we have allowed some to try in public meetings, and the laugh is soon turned to the other side. See our So-called "Mistakes of Moses," under heading, *The Book Wrong*, which gives an instance which really occurred, in Blackburn, once when the writer was lecturing there. But we do not wish to satirize honest doubt, but rather to suggest reasons for thorough enquiry and christian belief.

#### FOUR LEADING THEORIES.

Referring to the printed lecture before us we find that Mr. Howard selects *four* as the leading theories by which this miracle has been explained, and which even he himself cannot accept. The first is called

##### "THE POETICAL THEORY."

Those who accept this theory, he says, suppose that the hours of sunlight did really appear to them to be lengthened? Someone afterwards expressed his feelings in poetry, "with the usual poetical license," whatever that is, and incorporated his poem in a book of military songs called "The Book of Jasher." We reject this exposition for the same reasons as the writer; because, "firstly, there is possibly a more reasonable view; and, secondly, the genius of Hebrew poetry lends no confirmation to its position." And we further cordially agree with him when he adds;

"I have sought all through the Bible and have not discovered one instance of a natural event being exalted into a miracle by any of its bards." . . . .  
"This enquiry into the veracity of Hebrew poetry has amazed me—made me feel how, contrary to the general view, in all their highest inspirations, the Bible bards kept a clear eye upon the sober truth."

This, we think, is well and truthfully spoken. The second theory, he says, is called

##### "THE SPIRITUAL THEORY."

There are those who hold that God, at the command of Joshua, allowed the sun and moon to go on their journey as usual, but in their places "two other bodies of a spiritual kind were slipped in so stealthily that the Israelites were unaware of what was done." This theory, commonly held by Swedenborgians, the writer very properly rejects as charging God with decepton, and assuming an impossibility. He gives his reasons, which those who are interested to know can find by obtaining the pamphlet. Our space compels us to be brief. The next exegesis reviewed is, thirdly,

##### "THE OPTICAL THEORY."

Under this heading Mr. Howard says ;—

"It is true that light is refrangible, and also that we see, not as we think,

always straight and direct, but on lines of light. When light, in its flight, strikes a medium denser than that it has been travelling through, it is turned aside somewhat, and we are led to think that objects are not where they really are. If you thrust a stick into water it appears to bend at the surface of the water . . . We may also say that the stars are never where we seem to see them in the heavens, but where they were when the light we see them by left them."

So far we have been happy to agree with Mr. H., but from this he begins to flounder unconsciously in the meshes of absurd and extravagant philosophical theories. He re-affirms the popular fallacy that the sun is seen in the morning "eight minutes before he is above the horizon," that the light from some stars "would require thousands of years to cover the distance between us," and that

A "star or nebulae might be completely annihilated, and yet it would not seem to disappear from its position in the universe till its last beam of light had reached us, and that might be 20,000 years or even longer"!

He further affirms that "the axis of the earth is inclined to her orbit," that the "pole" dips so that "anyone living at the north pole would see the sun 12 or 13 days time before *he* actually rose above the horizon" (!) and moreover that "this would follow from the atmosphere bending the light beams, and the *north pole* rising by gentle graduation into the zone of day"! *Italics ours.* The writer innocently calls this contradiction "a fact," and says; "From this fact some have argued that the light rays of the sun and moon were bent, at Joshua's petition, to give him an extra 12 hours light to exterminate the enemy." And he quotes James Austin Bastow who supports this view in his Bible Dictionary. However, this theory, though "plausible" is rejected as "delusive," there being a vast difference "between the refraction of a few degrees on the one hand and that of half a circle on the other." We are then informed that

"THE FOURTH THEORY IS THE ASTRONOMICAL ONE."

Here of course, the tangle becomes greater than ever. We are told that

"The rotary motion of the *earth* was arrested, the arrested motion was prevented becoming heat, the water in the oceans, seas, lakes, and rivers was kept from obeying its natural laws, and the solar system was guarded against injury."

The writer, while agreeing, of course, with the "science" of the above paragraph, sympathises with men like Huxley and Tyndale, in their refusal to accept such an explanation, adding that Professor Tyndale, in *Fragments of Science*, remarks;

"There is a scientific imagination as well as an historic imagination; and when, by the exercise of the former, the stoppage of the *earth's rotation* is clearly realised, the event assumes proportions so vast in comparison with the

result to be obtained by it, that belief reels under the reflection. The energy here involved (in the "scientific imagination"?) is equal to that of six trillions of horses working for the whole of the time employed by Joshua in the destruction of his foes. The amount of power thus expended would be sufficient to supply every individual of an army a thousand times the strength of that of Joshua, with a thousand times the power of each of Joshua's soldiers, not for the few hours necessary to the extinction of a handful of Amorites, but for millions of years."

These calculations are all very pretty, but they are worse than useless as the Bible does not speak of "arresting the *earth's* motion," but of the *sun* standing still. Hence they are utterly beside the mark; but the above quotation serves to shew how men of "science" are led away from the Scriptures by unfaithful expositors and a false philosophy until, as Tyndale confesses, "Belief reels under the reflection." While christian men and so-called "Reverend Divines," who are paid to defend the Holy Writings, play into their hands by ignorantly, or cowardly, yielding the claims of unfounded astronomical theories so utterly subversive of Bible teaching and true Natural Science. However, it is only fair to the writer of the pamphlet under consideration to say that he rejects this "explanation" also; although, at the same time, he holds those astronomical theories by which it is supported. He also makes the same mistake of talking about the *earth's* motion being arrested instead of that of the sun, for he says;

"Why did not the ocean overflow the land? Run with a pail of water until you come in contact with a wall, and observe the effect upon the liquid, how it will dash over the side: and the sudden stoppage of the rotary motion of the *earth* (!) would naturally send the sea almost all over the dry land . . . You know the shaking you get with the violent stoppage of an express train going at sixty miles an hour, and we ask you, please, to *fancy* the result to us, and to all cattle, dwelling houses, monuments, and even trees, if the *earth*, which at the equator *moves nearly 1,100 miles an hour*, was brought quickly to a stand still."

Now that is altogether and utterly irrelevant. When will professed defenders of the Bible let it speak in its own terms? What infidel could wrest the Scriptures more from their plain literal and grammatical sense? The American infidel Ingersol writes just in the same strain respecting this miracle in his so-called "Mistakes of Moses." But is it not rather a mistake, and a grave mistake, of Ingersol, Tyndale, Howard & Co., to speak of the Bible arresting the *earth's* motion, when the account says nothing whatever of the kind; but distinctly tells us that it was the *sun* and moon which stood still? They may charge the Bible, if they like, with being contrary to modern science; but we should retort that it is both illogical and unscientific to condemn the Bible on such a charge until the "science" in question has first been shewn and proved to be true. Let them first prove the earth has any motion, be-

fore talking about the "arresting" of it. And we want something better than *Foucault's* pendulum experiment for this—especially as different pendulums will sometimes oscillate in opposite directions!—and more especially as practical experiments have already proved that the earth has no such motions as those attributed to it. The account of these experiments may be found in Parallax's great work, "Earth not a Globe." We have no space now to quote these experiments, as we are at present only engaged in shewing up the inconsistency of those who wrest the plain statements of the Holy Scriptures to suit the fanciful and absurd theories of modern "Science," falsely so-called. They may yet appear in the *Earth Review* in due course, if our friends will only come forward and sustain our hands in this unequal conflict. Some of them have already appeared.

(To be continued).

N.B.—On account of press of matter we are unavoidably compelled to leave over the completion of this article until March. But as it is already in type a complete edition has been printed in pamphlet form, price 2d. post free, to be had from the Editor. We hope our friends will help to give it a wide circulation.

### STAR MOTIONS *versus* THE EARTH'S SHAPE.

It is acknowledged as an axiom by good thinkers everywhere that all truth is harmonious, and that no one fact in nature can contradict or subvert another fact. It is not so with error, or even with plausible theories; these, owing to our limited knowledge, may appear harmonious for a time, but if one fact in nature, or in history, be found out inconsistent with and contradictory to those theories, this fact alone would be sufficient to stamp the theories as false. So it has proved with the globular theory. As a correspondent lately wrote; "Satan the father of lies, has reduced the art of deception to a science, and he is at the bottom of the globular theory, which he has provided with hooks and eyes that fit in marvellously with some phenomena." But one fact has been found out which is inconsistent with, and contradictory to the globular theory, and this fact, that water is level, absolutely level, is quite sufficient once and for ever to overthrow the globular hypothesis however marvellously some of its "hooks and eyes" may fit. If the world were a globe the surface of all standing water would be convex; "Parallax" and others have proved that it is not convex; therefore the earth is not a globe. On the other hand, if the earth were a plane the surface of all standing water ought to be level; practical experiments have abundantly proved that it is level; therefore the earth is a plane. The accounts of these experiments can be obtained by those willing to go to the expense of buying the literature, so it is not our purpose to reproduce them here. What we wish now is to point out that until

these practical experiments respecting the shape of the earth are properly disposed of, no other theories, or facts, respecting star motions or even the motions of the sun and moon, will be allowed to shake our confidence in the fact that WATER IS LEVEL. This is one of our sheet anchors. The other is that the Word of Him who created the world, and who "cannot lie," is in harmony with it. So that our vessel has a strong anchor at both ends. Let friend or foe destroy these, *if they can and dare to*, and our barge will then be driven by the fierce winds about to blow over the earth, and will probably be wrecked on the sands of scepticism or the rocks of infidelity. But as long as either of these anchors will hold, and each alone is strong enough to hold, our position is unassailable and secure. Our only danger lies in the possibility of insensately slipping the anchors ourselves; but this may our chief Captain graciously forbid.

However, we write to warn at least one of our correspondents of this danger, and the lesson may be useful to others. If water has been proved to be level, and the earth therefore a plane, no manner of star motions, or sun's motion either, can prove it convex or globular. If you subsequently find out other facts you cannot explain you must wait until you can, or until someone can explain them for you, but no true Zetetic will run away from the previously ascertained fact that water is level. It is inconsistent and illogical so to act; and no reasonable man will be guilty of such folly. Settle one foundation truth and *stick to it*, at least until there is some fair attempt to overthrow it; and be assured that other "facts," if really facts, will ultimately be explicable in harmony with the foundation fact already established. This is clear and logical, yet our friend on a P.C. says;

"In the E.R. for Oct. there is one fact twice mentioned which furnishes conclusive evidence that the earth is not a plane. I allude to the statement of your New Zealand correspondent *re* the sun's position night and morning of Dec. 21st. You will see at once that this will never harmonize with the Zetetic theory; in fact it demolishes it, while it harmonises exactly with the globular theory."

So we are "demolished" again! Yes, in the same way as we have been "demolished" many times before. But will it be credited? the writer of this post-card note is the same person who wrote the previous extract given above. "Demolished" too by a penny post card! It is really too bad. But stop. We *may* perhaps find some comfort in the "hook and eye" theory, so we again pick up our pen. How do you know friend H. that the "fact" referred to is a *fact*? Has it been corroborated by careful and accurate observation? Our N.Z. correspondent owned he did not speak with absolute and critical accuracy, but only in general terms. And if his observations should prove correct, as

possibly they may, are you quite sure that they "will never harmonize with the Zetetic *theory*"? Have you ever seen the Zetetic "theory" respecting star notions, and the motions of the sun and moon? Zeteticism, you ought to know by this time, is not like modern astronomy founded on theory, but on fact; hence its name from *zeteo*, I seek or search out. We *seek* facts, hence we admitted the N.Z. letters for further corroboration or refutation; but we *search* these things out, if time and opportunity be given us, and like a beast of prey with a keen scent, we *trace them out* to their source or origin. But the work requires care and patience. Yet because there is again a seeming difficulty our friend Mr. H. rushes to post his "discovery" to the different friends who support the E.R. ! On a former occasion it was a question of "degrees" that troubled him; and if we could not immediately settle that question to his satisfaction we were in danger of losing his support, a copy presumably of the E.R. regularly posted to him once a quarter ! We therefore wrote and published our article on "Degrees," thinking it might help really honest minds enquiring after truth, and minds capable of retaining it when found. Though receiving no pecuniary benefit for our trouble it is some satisfaction to know, through the kindness of those who do pay the printer, that our services are helpful to real Zetetics, or searchers after truth. In that article on "Degrees" we uttered a word or two of advice—*Patience*; and *Perseverance*. We now repeat these words, with another word of counsel from a higher source; "Hold fast that which thou hast"; and again, "look to yourselves that we lose not those things which we have wrought."

Now, however, we are asked for no explanation, although we think we could give one, but we are simply expected to "see at once" the whole of Zeteticism quietly "demolished"! Not so fast, good friend, for we have a few questions to ask *you* first to explain before *we* give up. How is it that there are planists at present living (and even lecturing in favour of the Plane truth) in New Zealand? Can they not see the southern stars, and watch the motions of the sun and moon? Was not our correspondent a planist whose letters have so disturbed you? Yes, yes; but *he*, like a true Zetetic, does not turn his back on the fact that water is level when he looks up amongst the stars or at the sun. Take an illustration. Suppose the floor of a large hall has been carefully surveyed and found to be perfectly level. Afterwards suppose someone observes an electric light swinging around the ceiling in a way it ought not, according to *his* theory. Should we allow him to persuade us that the floor of the room had been altered, and that it was now convex? Not quite; Surely!

If the earth be a globe how is it that there is so great a difference between places of equal latitudes north and south? If the sun circle

round a south "pole," as it does around the north why should there be this difference, evidence of which we cull from our opponents even? Is the midnight sun regularly seen in extreme south latitudes? Do southern stars all circle round one southern point? Or, are there more magnetic star centres than one? Where are they? Careful observations ought to be made from different parts of the world at the same time. The sun, moon, and planets have somewhat different motions from the so-called "fixed" stars. The former are sometimes directly over the northern parts of the equator and sometimes far south of the equator, according to the signs of the zodiac they happen to be in; whilst the "fixed" stars have practically always the same declination, and remain in the same groups or constellations.

The motions of both these sets of heavenly bodies need carefully watching and accurately recording, especially at the times of rising, culminating, and setting; not however with the view of ascertaining what shape the *earth* is, but with the view of ascertaining the nature of the *motions of those bodies which are actually seen to be in motion*. Even then care will have to be exercised lest we confound the motions of *light* with the motions of *the bodies emitting the light*. We too, like our unstable friend, have made a "discovery"; and we have for sometime past been thinking of publishing it, but we have been waiting for further light on the subject. If our friends all over the world will help us by clearly and accurately recording the observed motions of the heavenly bodies it would be of service. Our discovery relates to the behaviour and motions of *light*, as it comes from above and passes downwards through the atmosphere, a medium of ever increasing density. Let observations be made at different recorded times and places, say, when the sun, or any of the heavenly bodies, is directly over the equator, or in its farthest north or south declination. When, and where, such body seems to rise, to culminate, and to set; what kind of a course it seems to follow; what altitude it appears to attain; and what are the supposed latitudes and longitudes of these places. We must remember too that all these latitudes and longitudes are calculated upon the supposition that the earth is a globe; and they depend upon observations, however accurately taken, which are affected by the question as to whether light travels in straight lines or not when coming down upon us from the "lights" in heaven above. If the moon be observed, let note be made of her apparent size, shape, and position. If a bright fixed star be selected, whether it always appear to rise and set in the same direction from the observer, or whether its position seems to be affected by atmospheric conditions. If the sun be observed, say next March when he is on the vernal equinox, whether he seems to rise due east and to set due west in all parts of the world? We should then discuss what the terms east and west mean, and so might have some useful evidence for determining the

motions of the heavenly bodies, or at least the eccentricities of the motions of light as it falls upon us from above. This will be no light task ; but it needs doing before our friend H. can prove the globular theory from the sun's apparent position in New Zealand, or before we can fully explain all *celestial* phenomena and star motions. But if our friends, or our foes, want to discover the shape of the earth, in different parts of the world, they must test it as it has been tested in England, by looking down upon the earth—not by gazing up into the sky!—and by practical and carefully repeated experiments in surveying the surface of still water. If this be too much for their means, or their abilities, then they ought to be satisfied with the honest evidence of those who have so tested it here at considerable sacrifice of time and money.

(To be continued).

### GEOGRAPHICAL LONGITUDES.

“ Consider how infinitely small is the number of reliable longitudes which have been taken in the interior of countries other than Europe and North America. Take for instance Africa. Many scientific travellers have during the last century explored this continent in every direction, and the correct laying down of their route was the principal object with all of them. And how many correct longitudes are the result of their joint efforts? Dr. Lüddekke is of opinion that there are, up to the present time, hardly a dozen well-determined longitudes to be found of the interior of Africa. Many of our famous explorers, e.g. Barth, did not even try to make astronomical observations, and how unreliable the results of many others who made them are, becomes evident if we compare the longitudes which different travellers give of the same localities. Of course there are exceptions like O'Neill's determination of Blantyre, Dr. Vogel's route to Lake Tchad, and others ; but, generally speaking, as regards astronomically well-determined positions, the interior of Africa is to-day almost as much a *terra incognita* as it was a hundred years ago. The reason of this complete failure is evidently twofold—firstly that the reliable methods are too complicated or difficult for the majority of travellers, and secondly that several of the instruments as well as of the methods employed are not accurate enough.”—By *Henry G. Schlichter, D.Sc. in the Geographical Journal, Vol. 2, November 1893.*

### LECTURES.

Since our last issue, lectures have been delivered by Mr. J. Smith, in London, Dewsbury, and Bradford. Mr. Isaac Smith has also lectured in Bradford ; Mr. Breach, twice at Portsmouth ; and Mr. Skellam, three times in London. Reports should be sent us even though they may be crowded out, as some of these have been.

### THE “ WHY ” AND “ BECAUSE.”

A liberty great I beg leave to take  
In a question or two I would humbly make,  
Though scientists laugh they may have to quake,  
For they cannot stand questions at all ;  
That the Earth is a Globe all these learned folks say,  
A tearing and spinning through space far away,  
At hundreds and thousands of miles in a day,  
Like a bright, and a big shining ball !

But pray will you tell me how aeronauts see  
At high elevations, as high as can be,  
A “ wide concave surface ” ? which proves Sir, to me  
That the Earth is *not* like a ball :  
Now scientists think it the greatest assumption  
For any to have the audacity, bumpion,  
With mere common sense, or ordinary gumption,  
To question their “ science ” at all !

But tell us dear “ scientist ” if you are right,  
How is it old sailors have got such clear sight ?  
To pierce beyond your curvature, quite,  
Some hundreds of feet, less or more ?  
Should you ask for a proof of what I have said  
You will find that “ Cape Hatteras,” so I have read,  
“ At a distance of 40 miles off, far ahead,  
Can be seen often times to the shore.”

Is the surface of water then flat Sir, all round ?  
In practice it seems to be flat, but it's found  
In theory curved, and all Nature is bound  
To bow to the “ scientists ” laws !  
And why points the compass, if you can divine ?  
Both northward and southward—and at the same time,—  
If the centre's not north of a plane all in line ?  
Pray tell me the “ why ” and “ because.”

If the centre's the north then the “ pole ” is a myth,  
And the north star is right in the centre's zenith,  
So the Compass points level to centre forthwith,  
While the south is the circle all round,  
For a thousand miles flows the great Nile t'ward the sea  
And falls but a foot, so betwixt you and me,  
The rivers are level, as level as can be,  
Disproving a spherical ground.

How is it, Sir, Science, “ exact Science,” so stated,  
The sun's distance in miles has so differently rated,  
From twenty-four millions to a hundred dilated !  
And even from less to much more ?  
Because this one distance, so very elastic,  
Is reckoned the “ measuring rod ”—how bombastic !—  
To measure star distances vast and fantastic,  
Then why is it altered ? Wherefore ?

Pray how could the Ancients foretel all eclipses  
 As well as the Moderns who say what the "dip" is,  
 And even the Planist explain where the ship is,  
 And bring it back (up?) with a glass?  
 And how do folks live at the "Antipodes" station  
 All hanging heads downward—Oh what a sensation!—  
 And what's that stuff holding them fast, "Gravitation?"  
 Is it solid, or liquid, or "gas"?

And why when canals and long tunnels are laid  
 No allowance for curvature ever is made?  
 Are builders, surveyors, and others afraid  
 Of sliding right down the great ball?  
 And why when a ship is seen leaving the shore  
 Will she rise to the height of your eye, and no more,  
 On mountain or plain *both behind and before*—?  
 Perspectively proving no "fall."

However high o'er the sea level one tries  
 Still higher and higher horizons will rise,  
 And always quite level in line with the eyes,  
 But nowhere the curve of a globe:  
 Galileo afforded no proof in his mission,  
 When punished, alas! by old Rome's Inquisition,  
 But he suffered for teaching a quite false position,  
 So he put on a penitent's robe.

The Law of the Lord is reliable, sure,  
 The Creator's description is perfect and pure,  
 And the Word of our God shall for ever endure,  
 While the wisdom of worldlings shall fall:  
 And heaven's "above," saith the Lord, the most High,  
 The earth is "beneath" the grand dome of the sky,  
 And "under the Earth" is the "water," then why  
 Believe in the infidel's "ball"?

LADY BLOUNT.

"The astronomers arranged for a grand display of fireworks in the sky on Thursday night, 23rd. inst; but the ungrateful fireworks did not appear. The showman now take refuge in the clouds which shrouded the sky, and say that the fireworks were there, only they could not be seen. This is like the fireworks at Titipu, in honour of Nankipoo's execution. Nanki-poo would not see them, but they would be there all the same. It is believed that throughout the night we were careering through a storm of red-hot meteorites, the fragments of a comet smashed by a blundering planet some forty years ago. A shower of molten meteorites would have been a dramatic climax to the storms of the beginning of the week."—*The Birmingham Daily Mail, Nov. 25, 1893.*

We are glad to note that a vigorous press correspondence has been carried on by our Secretary, and other friends in the Portsmouth press, the *Wimbledon Gazette*, and other papers. Ed. E.R.

## THE SECRETARY'S STATEMENT.

## INCREASED PUBLICATION.

In presenting to our friends the financial position in which we stand at the expiration of twelve months, they will see at least that we have not been "making money." When, twelve months ago, some of us came together to consider the advisability of continuing our united public testimony, we hoped that every Zetetic would have come forward and joined the Society, and so helped on our God-given truth. But I regret to say this has not been the case. I, therefore, now ask every one who loves this truth to come forward and help to stem the tide of infidelity and error increasing everywhere around us. Let me ask every reader if he cannot join as a Member or as an Associate, at least to become a constant subscriber to and reader of our organ. The price will be one shilling and threepence for the next year's six numbers of the *Earth Review*, as we hope (D.V.) to issue it every two months instead of quarterly as heretofore. If you can, strengthen our hands also by joining the U.Z. Society, for "united we stand, but scattered we fall." Remember friends that it is no mere notion of our own that we are contending for, but God's own truth in Creation and His Word; and as this affects His glory and our blessing, present and future, let us see to it, that we hide not our "one talent" and so suffer loss. "Then come to the help of the Lord against the mighty." A half-penny per week is nearly the price of an Associate's subscription.

We are about to start a lending library for the use of Members and Associates. Any friend who has any books *on any of the so-called sciences* to spare, I should be glad to receive as a gift to our library. Our object in this is, that we may have standard works to refer to in our contentions for the truth. The list of books with rules can be had from me by enclosing 1d. stamp.

## SOCIETY'S FUNDS.

Cash received to November 26th, 1893	£47 17 9
" Expended in printing, &c. "	£46 7 9
Balance in hand	£1 10 0

## UNIVERSAL ZETETIC SOCIETY.

TREASURER AND SECRETARY.

JOHN WILLIAMS, 32, Bankside, London, S.E.

EDITOR OF "EARTH REVIEW."

"ZETETES" (MR. ALBERT SMITH), 164, St. Saviour's Road, Leicester.

## COMMITTEE.

LADY BLOUNT, Bath.  
 Mr. JOHN SMITH, Halifax.  
 „ EDWARD D'ARCY ADAMS, LONDON.  
 „ ISAAC SMITH, Halifax.  
 „ AMOS PERRY, Ashton-u-Lyne.  
 „ JAMES NAYLOR, Birmingham.  
 „ A. E. SKELLAM, London.

## OUR MOTTO.

For God and His Truth, as found in Nature and taught in His Word.

## OUR OBJECT.

The propagation of knowledge relating to Natural Cosmogony in confirmation of the Holy Scriptures, based upon practical investigation.

## RULES.

- 1—Everything extraneous to "Our Object" to be avoided.
- 2—The so-called "sciences," and especially Modern Astronomy, to be dealt with from practical data in connection with the Divine system of Cosmogony revealed by the Creator.
- 3—Every honest opponent to be treated with respect and consideration.
- 4—Members to subscribe not less than six shillings a year, which entitles them to two copies of The EARTH (not-a-globe) REVIEW each issue, and a copy of every paper issued by the Society. Such will be also eligible to be voted to serve on Committees, to vote on motions, to write articles (subject to editorial approval) for the Earth Review, and to propose (subject to Rule 8.) any alteration thought to be beneficial to the Society.
- 5—Associates to subscribe not less than two shillings and sixpence per year, which entitles them to a copy of every publication issued by the Society.
- 6—All subscriptions to the Society to be made in advance (quarterly if desired) and to the Secretary.
- 7—The financial year to commence on September 21st.
- 8—Three months notice to be given *in writing* to the Secretary, before any alterations, or additions to the Rules can be made. The Secretary to bring any suggested alteration or addition before the whole of the Committee, to vote on the final decision.
- 9—Every meeting of the Society to be opened with prayer and the reading of some portion of the Holy Scriptures.
- 10—The Society's meetings to be held (pro. tem.) at 32, Bankside, Southwark, London, S.E.

Signed on behalf of the Committee,

JOHN WILLIAMS, Secretary.

P.S.—Would friends whose subscriptions to the U.Z.S. are now due kindly forward the same to the Secretary, who will acknowledge them. Friends wishing to form local branches of the Society are requested to write to the Secretary.

## CORRESPONDENCE.

All Letters intended for "THE EARTH (not-a-Globe) REVIEW," must be legibly written on one side only of the paper, and should have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. A stamped addressed envelope to be enclosed for a reply. Short pointed letters or articles preferred.

The Editor cannot, of course, be held responsible for the various opinions of his correspondents; nor can he enter into correspondence respecting articles, &c., held over or declined.

Letters must be prepaid, and addressed "ZETETES,"

Editor of The EARTH (not-a-Globe) REVIEW, Plutus House,  
 St. Saviour's Road, Leicester, England.

## NOTES.

W. M. Runciman, New Zealand.—Thanks for copy of your Lecture on the *Zetetic Philosophy*. It is good and suggestive. Opponents have said that that if they were only in southern latitudes they could easily prove the earth to be a globe, but it seems that thoughtful friends living there are still satisfied that the earth is a plane. New-Zealanders Forward!

Dayswater.—Thanks for sight of the *Geographical Journal* and other help. Would be glad to see other Nos. of the G.J. occasionally, if they contain matter suitable for the E.R.

J.A., Belfast.—Thanks for cuttings, &c. Could you obtain for us the loan of the block for the drawing of the *Avenue of Palms*. It is a good illustration of perspective principles.

Auckland, N.Z.—Thanks for two pamphlets on the so-called "Higher Criticism." We hope to take up this subject ere long.

Southark, S.E.—We also have given copies of the E.R. and other pamphlets to the Monk "Ignatius," when he was in Leicester. He stands up to defend the Inspiration of the Holy Scriptures, so if he is consistent with his utterances on this question he must accept Bible teaching respecting the structure of the earth. Let us hope he will. We are glad to see the "*Times of Restitution*" (America) is taking up your challenge to discuss this important question. We will page the E.R. as you suggest so that the two years' *Reviews* may be bound together. The previous pages can be altered neatly with a pen.

"Enquirer"—We do not notice anonymous correspondence, and we very much doubt whether you are the enquirer after Truth you profess to be.

Hottentot.—We have been compelled to reserve your long letter with several others, for lack of space.

Wm. Carpenter.—Ditto. In our next?



## Letters to the Editor.

Doncaster, Oct. 9th, 1893.

Dear Sir,—I saw the other evening a gentleman from New Zealand, who declared they had a considerable amount of twilight there, and further that the outward voyage was made round the Cape of Good Hope to the east, and the homeward voyage east to Cape Horn, and then to the west coast of Africa before turning north, to get the benefit of easterly currents, and thus the outward and homeward voyages circumnavigated the "globe" in S. latitudes in a time which would be impossible if the degrees of longitude were so much larger as they should be were the earth a plane. Have you any reliable information on this point, or can you refer me to any books that give it. Birley's book (Parallax) says p. 96, last line, the direct distance Valencia to Cape Town is 1,164 miles—this must be a mistake. The S. African Steamers from Southampton cannot do it under 15 days. I am sure that one of the most pressing matters that requires settlement in this controversy in the measurement of a degree of longitude at two different latitudes south of the equator: or some reliable information from a sea-captain who has sailed a degree there, and can give some reasonably good estimate of the distance.

Believe me, yours very truly,

H. C. BOWKER, M.A.

"Degrees" can only shew the sun's motions, or the motions of light. But reliable information is needed concerning distances and degrees in southern latitudes, and we have not yet got it. Whenever it comes, however, it cannot overthrow the fact already established that water is level, and the earth therefore a plane.

Ed. E.R.

Belfast, Oct. 28th, 1893.

Dear Sir,—May I introduce myself to you as a fellow truth seeker, and one who had the privilege of receiving her first lessons from the late Mr. John Hampden.

What a revelation it was, and has been ever since! . . . It was at Keswick that I learned the overwhelming fact that the Lord Jesus would one

day in the near future return to earth—to this very earth.—This made all about the earth very important to me. I earnestly prayed for God to shew me more and more clearly the truth of Christ's return, and the amazing glory of His purposes with regard to this Earth, which he comes to redeem from sin and sorrow and death.

It was this study which prepared me for the knowledge of the true form of the Earth when the first intimation of this "sunburst" of truth reached me. I had hung over the passages relating to this subject, but owing to my astronomical training I had given them up in despair. But gradually through Mr. Hampden's papers the light broke in and I quickly gave astronomy to the winds, although at one time I was very proud of my knowledge of that so-called "science."

And now, only last summer, has come to me a fresh "sunburst" of knowledge through reading *The Faith*; but I am sorry its precious pages are sometimes marred by allusions to this so-called "globe."

The "Earth Review" is a great boon, and the knowledge contained in it is making progress here, although we have, of course, much opposition. I have a valued copy of "Parallax" which is very seldom in its place on my bookshelf!

I have attempted to make a model of the floating earth according to the Scriptures, and hope to have it finished soon. The continents and islands are moulded on glass, a friend has made beautiful little miniature ships to show the voyage "round the world." It is surrounded with the great ice barrier, and we hope to have a main-spring above with a small electric light to represent the sun, so as to shew the cause of day and night, summer and winter, &c. . . .

I should apologise for saying so much about myself, but I thought you would be interested in hearing how God makes a true Zetetic. So thanking you in anticipation, I am,

Yours very sincerely,

J. B.

Lyndhurst, Oct. 10th, 1893.

Dear Sir,—“I lived for 20 years at Brighton (in Sussex). On several occasions I saw the Isle of Wight from Brighton, distance 40 miles. The newspapers tried to explain this strange fact by saying that it was only a mirage produced by refraction, but I knew better, for when the ships are seen so refracted they appear inverted in the air, which was not the case with the island, besides, I could see the sea on the other side of the island, beyond it shining in the solar rays, which proved that there was no refraction or mirage. The sea beyond looked as if above the island in perspective proper. When I stood on the cliffs near Kemp-town I saw three ships almost in a line with one another, one near, the second further off, the third on the horizon, the second ship appeared above the first, the third above the second, and I could see that the intervening water was level in perspective, the horizon rising to the level of the eye. If the earth were a globe, a man on the top of a mountain ought to see the horizon line below him, and the earth would slope down away from him on all sides, no matter how large the globe was. The altitude from which I viewed the island was about 200 feet above the sea level, so allowance must be made for that. 40 m. squared X 8 in. equals 1066 ft.—200 equals 866 ft. Now the highest part of the Isle of Wight does not exceed 500 feet, thus there would be a clear 300 feet at least above the highest point, below the visible horizon, and it should be noted that I saw not merely the top of the island, but the whole island from the top to the cliffs on the east end near the shore, so no amount of refraction or mirage can account for my seeing an island 800 feet higher than it ought to be if the earth were spherical. It is said that sometimes the coast of France is visible from Hastings, but I do not know the exact width of the channel at that point.

I am, Sir,

Yours in the Word,

C. R. COOKSON.

Darlington, Oct. 11th, 1893.

Dear Sir,—Many thanks for sending parcel.

I have had on my shelves for some time "Earth not a Globe," and appreciate it.

Isaac Smith's latest work is good; but he is decidedly in error when denying that the moon is related to the tides.

The Post-diluvians (possibly also the Anti-diluvians) call the moon, *Meni* or *Mene*, because she is the timepiece of Nature—measures the equinoxes—adjusts eclipses, and regulates the tidal rhythms.

On Shields bar (Tyne) it is always high water at 3 o'clock p.m. whenever the moon (*Mene*, the measurer) is at new and full—I connect the measuring power of the moon with Gen. 1.14—she is God's chronometer.

But there is another mysterious tidal movement, not at all easily measured, and the cause of which is unknown; *this* may be related in some way to some responsive throbbing between the earth and the deep.

It reminds me of the wonderfully and most regular ebb and flow of the barometrical column, twice every day—most mysterious.

I'm not prepared to accept all the lunar influence subscribed to by astronomers; but my observations on the sea-coast (east) for 40 years show a most regular relation between the tides and the phases of the moon.

Why do the tides not always ebb and flow at the same hour and time? but are later always by about three-quarters of an hour?

I think we want to know more how the moon, the atmosphere, the mercurial column, and the tides are related.

Yours faithfully,

(Dr.) EDWIN W. FOSTER.

ANTI-INFIDEL LECTURES.

Nov. 7th, 1893.

Dear Sir,—I write to inform you that Mr. Celestine Edwards, editor of *Lux*, has been to Ashton-under-Lyne, giving lectures professedly opposing Infidelity. But I find he is an infidel himself on many points of Scripture. He gave one lecture entitled *Bible Difficulties*. But he first makes the difficulties and then tries to "explain" them. He does not believe that Noah's Flood was

universal though Moses says it was; and he does not believe the Bible account of Creation, but believes the Earth to be a globe. He does not believe the sun and moon stood still at Joshua's command, although the Bible distinctly says they did so.

After his lecture I asked him if he could give a practical proof that the Earth was not a globe. He said a ship going out of sight at about six miles was a proof, but he did not shew how. So I went on the platform to discuss about ships going out of sight at sea, but he would not argue about this. He said he would discuss about Joshua and the Sun and moon. I then told the people that there was no difficulty about this miracle, the sun being a comparatively small body, and moving around the heavens every day, and that if the earth were a globe, this part of the Scripture could not be true. Then I said the very fact of the Ark being built was a proof that the Flood was universal. For we are told that all in the dry land died. I told Mr. Edwards that if the Earth was a globe there could be no absolute "up" and "down," and that if some one went "up" to heaven from England, and a friend went "up" to heaven from New-Zealand they would be going in two opposite directions. I asked him when they would meet? But at this point the chairman got on his feet and said he could not allow Mr. Perry to go on any longer as he had gone all round the "globe," so it was time to bring the meeting to a close!

As the Bible teaches that heaven is "above" us, why should a man lecture against infidels when he does not believe the Bible himself?

Yours faithfully,

Ashton-u-Lyne.

A. PERRY.

New Plymouth,

New Zealand,

Oct. 5th, 1893.

(Received Nov. 9th.)

My dear Friend,—I enclose you a cutting from our daily paper of Sept. 22nd, 1893, and a few pamphlets to shew you what I have been doing—my lecture was delivered before the Mutual Improvement Class of this town—and although it was the last night of the

session, it is admitted on all hands to have been the best; there was nearly 200 persons present.

I was not a member of the class; and was allowed 40 minutes for lecture—when the time had expired, a vote was taken and I was allowed another 40 minutes—when 9 o'clock was reached, a vote was put to adjourn the meeting for a fortnight, an amendment was put to allow Mr. Runciman another hour to hear and answer questions, which was carried unanimously, and only some 5 or 6 persons left the hall. You see that I spoke for 2½ hours, and can assure you it was the greatest feat in talking I ever did. My advertisement was put in the paper after the lecture, now two weeks since, and as yet no one has accepted my challenge to debate the question with me. I have had a very lively time since the lecture, hearing and answering questions, but none as yet seems to relish the position of defender of the greatest monstrosity ever palmed upon us in the name of "science"—however we are waiting with patience.

I shall let you know how the case proceeds; and hope to hear from you by first mail.

I shall be glad to answer your questions

We have had a dreadful season here for rain and wind—we hope however that now we shall have spring and summer of a very pleasant kind. Trade in N.Z. is fairly good—perhaps good enough to warrant some of our Zetetic friends coming this way to help us.

Yours very sincerely,

WM. M. RUNCIMAN.

N.B.—I have lately been appointed a Justice of the Peace in New Zealand.

[The Report of the Lecture will be found in another column. ED.]

Dear Sir,—A Mr. Caldwell Harper wrote to ask me, "Are not Mr. Revell's admissions somewhat of a bomb in the Zetetic Camp?" I replied, "O dear no! Why should they be? Every 'bomb' that falls into the 'Zetetic Camp' necessarily falls into six miles of standing water which is horizontal from end to end! and upon the flat banks which the 'Zetetic Camp' is founded. Consequent upon this, the fuse of the 'bomb' is instantly put

out. There is only one "bomb" that will ever have any effect in the "Zetetic Camp," and it is a "bomb" you have not yet been able to manufacture! Prove by a practical and a direct appeal to six miles of standing water, anywhere in the world, that curvature exists at the rate of eight inches per mile, multiplied by the square of the distance in miles." This, Sir, is the bomb our enemies need before they can hurt our camp, and until this is manufactured either in the heavens above, or on the earth beneath, or in Hades under the earth, we shall only laugh at every other missile. C.H. replied, "Even if certain particular pieces of water are flat, the southern stars show conclusively, that the earth at large is not." To this I made answer, we do not say that "certain particular pieces of water are flat," but the surface of all standing water EVERYWHERE is horizontal. This fact is confirmed by your own science text books! Lardner in his "Natural Philosophy," p. 16. says, "a liquid surface when at rest always assumes the form of a horizontal or level plane." The "southern stars" do not in any way shew that the earth is not a vast irregular plane. Their motions have no more to do with the shape of the earth or water than the colour of your eyes has to do with the shape of your feet; I can only look upon such a quibble as the confession of a defeated gladiator. If—and C.H. may refute this if he can—if the World be a rotating sea-earth globe, then it is an absolute necessity that the water on its surface must partake of its curvature EVERYWHERE, and consequently nowhere can its "surface when at rest assume the form of a horizontal, or level plane"! This is the *experimentum crucis*, and where is the man, except a Zetetic, who now dares to appeal to the surface of standing water anywhere in the World. But, Sir, my friend tried the "Lycopodium experiment" to prove the world's rotation, and finding it a disgusting failure he said, "I should like to find out who first suggested this

particular incantation"! Now why did not my friend put the basin of water containing the charcoal and lycopodium up among the "southern stars" to prove his globe's rotation? If the "southern stars" shew conclusively that the World is a rotating sea-earth globe my friend should have tried the "lycopodium experiment" not on the floor but upon the ceiling! That is the place of the southern stars. Our friend says the N.Z. evidence proves at any rate that the sky does not revolve round the North Pole as its only pivot," and therefore that Zetetic Astronomy is wrong.

I replied, In Airy's Popular Astronomy he says, "it is established as a general fact, that all the stars move accurately in circles round one centre, this is a fact of accurate observation . . . the stars move accurately . . . as if they turned uniformly round an imaginary axis." Professor R. S. Ball says, "We may suppose that the celestial sphere is revolving round the earth from east to west, while the earth is at rest." Does this prove that modern astronomy "is all wrong"? What is sauce for the goose is sauce for the gander you know.

C.H. confesses;—"I cannot account for the visibility of lighthouses, etc. at such great distances on the globular theory, without supposing a great deal of refraction." Yet—and the attention of an "Enquirer" is requested to this confession—we are told that "Zetetics often claim a most unlikely amount of refraction (see Parallax)." But now comes the final confession in favour of Zeteticism. He says; "No doubt water is horizontal." There! after about three years our friend at least confesses to the truth; but alas! he tries to turn its keen edge away from his own soul by saying, "but horizontal means parallel to the horizon and the horizon is obviously circular." As if a circle could not lie flat!

Yours truly, JOHN WILLIAMS.

## A VOYAGE TOWARDS THE ANTARCTIC SEA.

(REPORT BY WM. S. BRUCE.)

"On January 12th, 1893, we saw what appeared to be high mountainous land and glaciers stretching from about 64° 10' W. to about 65° 30' S. 58° W.; this I believe may have been the eastern coast of

Graham's Land, which has never before been seen. But it would be unwise to be too certain, for *it must have been 60 miles distant.*"

"METEOROLOGY.—Periods of fine calm weather alternate with very severe gales, usually accompanied by fog and snow, the barometer never attained 30 inches. The records of air temperature are very remarkable: our lowest temperature was 20°.8 Fahr. our highest 37°.6 Fahr., only a difference of 16°.8 Fahr. in the total range for a period extending slightly over two months. Compare this with our climate; where in a single day and night you may get a variation of more than twice that amount. The average temperatures show a still more remarkable uniformity."

"December averaged 31°.14 Fahr. for one hundred and fifteen readings; January 31°.10 Fahr. for one hundred and ninety-eight readings; February 29°.65 for one hundred and sixteen, a range of less than 1½° Fahr.

This I consider to be very significant, and worthy of special attention to future Antarctic explorers, for may it not indicate a similar uniformity of temperature throughout the year. Antarctic cold has been much dreaded by some; the four hundred and twenty-nine readings I took during December, January and February show an average temperature of only 30°.76 Fahr; this being in the very height of summer in latitudes corresponding to the Faroe Islands in the north, but I believe the temperature of winter will not vary very much from that of summer. This uniformity of temperature partly accounts for the great accumulation of ice which is formed, not on account of the great severity of the winter, but because there is practically no summer to melt it."

"Mr. Seebohm has vividly pictured the onrush of summer in the Arctic; *but how different in the Antarctic.* There, there is eternal winter, and snow never melts. As far north as a man has travelled he has found reindeer and hare basking in the sun, and country brilliant with rich flora; *within the Antarctic circle no plant is to be found.*"

"Long shall I remember the beauties of these ice-bound scenes, the grandeur and the silence. One's feelings cannot be expressed, one's thoughts cannot be fathomed as one stands alone during the night watches on the deserted deck while the sun skirts the horizon and paints the world with colour, and the white ice floats in the calm black waters."

REPORT BY C. W. DONALD, M.B., C.M.

On the passage out, we, on board the ACTIVE, touched at the beautiful Island of Maderia in October, and two more months landed us in the barren Falkland Islands. Sailing thence on December 11th, we crossed the stormy waters to the east of Cape Horn, and saw our first

iceberg on December 18th. On the same day we sighted Clarence Island—one of the South Shetlands. These are called after our own northern Shetlands, and the part sighted by us lies only some 60 miles nearer the pole. *But what a difference between the two places.* Our own Shetlands bright with ladies dresses in light summer garments, and carrying tennis racquets and parasols, the South Shetlands, even in the height of summer, clad in an almost complete covering of snow, only a steep cliff or bold rock standing out in deep contrast here and there, the only inhabitants being birds or seals; and even the bird life, with the exceptions of the penguins, is scanty. Sir James Ross on his third voyage entered the ice at nearly the same spot, and, fifty years before—all but a week—had sheltered from a westerly gale under the inhospitable shores of Clarence Island. Its highest point stands 4557 feet above sea-level."

"Taking the average snowfall as one inch a day, that is to say about thirty feet a year, the foundations of each of these bergs must have been laid down about sixty years before it becomes a separate entity, now the question naturally arises—*why should these bergs differ so much from the high pinnaled bergs of the north?* The latter, it is well known, are formed from deep glaciers, running in narrow ravines. But still this does not answer the question. I think the explanation must lie in the geological structure of the two lands."—*Geog. Jour. Vol. 2, Nov. 1893.*

[Query. Is not the explanation to be found rather in the fact that there is no summer there, like there is in the north? But there ought to be if the earth were a globe. But as there is not it proves the earth is not a globe. In the above quotations the italics of course are ours. ED. E.R.]

### "TRUTH." (?)

"A formidable rival has appeared to the lunatics who persist in maintaining, in defiance of argument and demonstration, that the earth is flat. He hails from the town of Dumfries, and has embodied in a book a New Theory of the Universe. My acquaintance with this bold spirit is derived from a letter addressed by him to a Member of Parliament soliciting an order for one copy of his book, price 2/6, post free. The following extracts will show that the author does not under-rate the surprising nature of his discoveries:—

I can assure you it is the greatest discovery ever yet brought out in science, and will certainly bring immortal fame to Scotland. . . . It is the masterpiece of the nineteenth century, the crowning point of science, and no work has yet received higher praise.

No one, I think, will contradict this last assertion."—From "*Truth*," Oct. 12, 1893.

[We should naturally expect "*Truth*" to speak the truth at all times; but there are two libels against the Planists in the first two lines of

the above quotation. They are first-called "lunatics"; and then it is asserted they maintain that the earth is flat in "defiance of argument and demonstration." The pages of the *Earth Review* are evidence that these statements are libels; and if the editor of so-called "*Truth*" will open his pages for discussion on the shape of the earth we will give him further evidence of his departure from veracity.

With regard to our "rival" of Dumfries we may say that he is evidently on the side of "Truth" and the globularists, as regards the shape of the earth; and if this great boaster is one of our most formidable opponents, we need not fear much for our position as Planists. Our opponents are welcome to his assistance. Perhaps he would make a suitable companion to "Truth" of the above quality, whose joke is as stale, and as flat, as the surface water of our common canals! ED. E R.]

### IS THE EARTH A GLOBE?

At the meeting of the Mutual Improvement Society, New Plymouth, N.Z., on Thursday evening Sept. 22nd, 1893, a lecture was delivered by Mr. W. M. Runciman on the above subject. There was a large attendance, and unusual interest was taken by the audience in the subject under discussion.

Mr. Runciman in his opening remarks, stated that in bringing what is known as the "Zetetic" philosophy under the notice of the members he was actuated chiefly by a desire to create interest in a matter of scientific importance, and which had not received much attention from the people generally. They had been told that the earth was a globe, and the majority of people had accepted that statement without question. He would endeavour to show them that the globe theory was an erroneous one, and would not work out when tested by facts. He briefly stated the Copernican system of astronomy which affirms that the earth is a globe, and then he proceeded to urge the reasons against that system. He stated that the believers of the Zetetic philosophy held that the earth was not a globe, and that it has neither diurnal nor annual motion, but on the contrary the earth is an immense plain, perfectly at rest, except the beautiful and gentle rising and falling on the mighty waters by which the tides are produced. First of all he would draw their attention to the fact that there is not a single sentence in the entire Bible that suggests the idea that the world is a globe in motion. No human being if they read the Bible from beginning to the end would have the least idea that the earth was a globe or planet, travelling through space at the rate of seventeen miles a second or travelling through space at all. He then referred to modern science and quoted from various authors. J. Glashier, F.R.S, in his work "Travels in the

Air," states: On looking over the top of the car, the horizon appeared to be on a level with the eye, and taking a grand view of the whole visible area beneath, I was struck with its great regularity; all was dwarfed to one plane; it seemed too flat, too even, apparently artificial." In his accounts of his ascents in the air M. Camilla Flammarion states:—The earth appeared as one immense plane richly decorated with ever-varied colours; hills and valleys are all passed over without being able to distinguish any undulation in the immense plane." He quoted an engineer of 30 years standing who wrote to the *Birmingham Weekly Mercury* in February, 1890 to the effect that all locomotives used on the railways are designed to run on what may be regarded as true levels or flats; there are of course, partial inclines or gradients here and there, but they are always accurately defined, and must be carefully traversed. But anything approaching to 8in. in the mile, increasing as the square of the distance "could not be worked by any engine that was ever constructed." The Rev. T. Milner, M.A., writes:— "Vast areas exhibit a perfectly dead level, scarcely a rise existing through 1500 miles from the Carpathians to the Urals." He produced a table giving the supposed curvature of the earth according to the Copernican theory. The table showed that in a distance of 164 miles there ought to be, if the earth be a globe, a curvature of 24,000 feet! He asked who could believe such a theory. He quoted from many of the leading scientists, thus showing considerable research on the subject. A number of members criticised the lecture.—*From the New Plymouth Daily Paper, N.Z.*

### MORE ASTONISHING BIBLICAL FACTS.

"The Bible by Modern Light." Creation to the Patriarchs. By Cunningham Geikie, D.D., L.L.D. Edin., D.C.L. Illustrated. (London: J. Nisbet and Co.)

Chapter IV. of this book opens as follows: "The zeal to defend the Word of God from all hostile attacks is a noble one, but the history of the past is a continuous lesson of the supreme importance that it be a zeal according to knowledge." On the lines followed by Dr. Geikie, the history of the present seems likely to supply the same lesson. In his anxiety to square the statements in Genesis with the discoveries of science, he makes assertions which have the charm of novelty, but also the vice of inaccuracy. For example, "Moses affirms that the sun, as well as the moon, is only a light-holder. Astronomy declares that the sun is a non-luminous body, dependent for its light on a luminous atmosphere." It is to be regretted that the authority for this astounding statement is not given. The implication is that science confirms the "Mosaic" account of the existence of light before the sun, and denies the emission of radiation from the solar nucleus. Modern astronomy finds in the contraction of the sun's mass the probable cause of maintenance of his energy. Again, "Moses asserts that there is an

expanse extending from earth to the distant heights in which the heavenly bodies are placed. Recent discoveries lead to the supposition of some subtle fluid medium in which they move." If, as we presume, Dr. Geikie refers to the ethereal medium, which is supposed to fill space and also the spaces between the minute particles of all bodies, his ignorance of the several "states" of matter does indeed evidence a zeal not "according to knowledge." But surely he knows, or should know, that to the Hebrew of old, as to the Greek of Homer's time, and to the Polynesian of to-day, the firmament was a solid dome, and no ether-filled expanse in which the stars perform their movements. . . .

Dr. Geikie represents a class of fretful, uneasy-minded expositors, who tremble lest the theory of the inspiration of scripture should be upset by the non-confirmation of its scientific, historical, and topographical statements by modern research. Why this feverish anxiety to harmonise the nebular hypothesis with the first verse of the Book of Genesis, and the reference to Accad with the pre-Babylonian civilisation? . . . He hastens to contend that "in any case the book as it stands is to us the very word of God, speaking as only He could, through His servants, to mankind." It seems well-nigh incredible that with "the latest translations of the Assyrian and Babylonian tablets" before him, and with the consensus of all competent scholars as to these recording the cosmical legends whence those of Genesis are derived (?) that a writer professing to illuminate the "Bible by modern light," can place himself in such an *impasse*. . . . But our chief complaint against this book is its lack of straightforwardness. It is an evasive commentary. Every crucial question is clouded in ink, after the manner of the retreating cuttle-fish. The chapters on Adam and Eve and their descendants, and on the Flood, are filled with a mass of interesting but irrelevant talk. . . . A few cheap rhetorical phrases about that "terrible and all-destructive visitation" which the "condition of things among mankind" drew "down as awful punishment," are followed by discussions on the size of the ark, and the volcanic commotion that might have brought about the "catastrophe." Nowhere does Dr. Geikie come to close quarters with the difficulty of reconciling the legend of man's special creation with the demonstration of biology as to his unbroken descent with modification from lower forms (!) or the legend of his paradisaical state with the evidence supplied from every habitable part of the *globe* (!) as to his primitive savagery; or the legend of a flood with the geological arguments there against, to say nothing of the grave ethical aspects of the question. Such methods as these, while confirming no man in the faith, and convincing no sceptic, moreover, do great injustice to the Bible. For they obscure its real value as a record of ancient speculations (Oh!) into the causes of things corresponding to those of other peoples than the Hebrews.—*From the Daily Chronicle, Oct. 17th, 1893.*

# THE EARTH—NOT A GLOBE—REVIEW.

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 6.

MARCH, 1894.

PRICE 2D.

## THE SUN STANDING STILL.

(Continued).

### THE LATEST EXPOSITION.

But our readers will naturally be anxious to know what is the final "explanation" given by the writer in question, who acknowledges that he had previously been "utterly bewildered with every attempt either to explain the miracle, or to explain it away." We shall let him speak for himself. He says;—

"I have now a FIFTH VIEW to lay before you, which appears to be both rational and simple." . . . "My *belief* is this: Joshua and his men having walked all night, as the 9th verse tells us, would be tired next morning, but God caused a great trembling to spread itself amongst the foe, and there was an easy victory. When the war had pursued the Amorites some distance, hailstones fell upon them and did much damage. At the approach to Beth-horon the hailstorm increased in fury; and Joshua, seeing the devastation produced, and being cognisant of the fatigue of his men, *prayed Heaven to let the hurricane go on* till total and irreparable disaster was inflicted."

We refrain from saying all we think about this so-called "explanation," as the writer is evidently both sincere and devout; and he says that "it flashed across my mind many years ago, when I was on my knees." But we think it doomed to the same failure as the rest, and for similar reasons; it is not true to the sacred narrative. It reminds us of what the editor of the *Daily Chronicle* said of Dr. Geikie's book, *The Bible by Modern Light*. "He makes assertions which have the charm of novelty, but also the vice of inaccuracy." (See fuller remarks from the *D.C.* in another page). This is the case with the present attempt. We have no record that Joshua "prayed Heaven to let the hurricane go on." This is an assertion, not of the narrator, but of the "expositor." Joshua prayed for the *sun* to "stand still," not for the *hailstorm* to proceed, and we are told that "there was no *day* like that, before it or after it, that the LORD hearkened unto the voice of a man for the LORD fought for Israel." But to get rid of this fact our expositor says;

expanse extending from earth to the distant heights in which the heavenly bodies are placed. Recent discoveries lead to the supposition of some subtle fluid medium in which they move." If, as we presume, Dr. Geikie refers to the ethereal medium, which is supposed to fill space and also the spaces between the minute particles of all bodies, his ignorance of the several "states" of matter does indeed evidence a zeal not "according to knowledge." But surely he knows, or should know, that to the Hebrew of old, as to the Greek of Homer's time, and to the Polynesian of to-day, the firmament was a solid dome, and no ether-filled expanse in which the stars perform their movements. . . .

Dr. Geikie represents a class of fretful, uneasy-minded expositors, who tremble lest the theory of the inspiration of scripture should be upset by the non-confirmation of its scientific, historical, and topographical statements by modern research. Why this feverish anxiety to harmonise the nebular hypothesis with the first verse of the Book of Genesis, and the reference to Accad with the pre-Babylonian civilisation? . . . He hastens to contend that "in any case the book as it stands is to us the very word of God, speaking as only He could, through His servants, to mankind." It seems well-nigh incredible that with "the latest translations of the Assyrian and Babylonian tablets" before him, and with the consensus of all competent scholars as to these recording the cosmical legends whence those of Genesis are derived (?) that a writer professing to illuminate the "Bible by modern light," can place himself in such an *impasse*. . . . But our chief complaint against this book is its lack of straightforwardness. It is an evasive commentary. Every crucial question is clouded in ink, after the manner of the retreating cuttle-fish. The chapters on Adam and Eve and their descendants, and on the Flood, are filled with a mass of interesting but irrelevant talk. . . . A few cheap rhetorical phrases about that "terrible and all-destructive visitation" which the "condition of things among mankind" drew "down as awful punishment," are followed by discussions on the size of the ark, and the volcanic commotion that might have brought about the "catastrophe." Nowhere does Dr. Geikie come to close quarters with the difficulty of reconciling the legend of man's special creation with the demonstration of biology as to his unbroken descent with modification from lower forms (!) or the legend of his paradisaical state with the evidence supplied from every habitable part of the *globe* (!) as to his primitive savagery; or the legend of a flood with the geological arguments there against, to say nothing of the grave ethical aspects of the question. Such methods as these, while confirming no man in the faith, and convincing no sceptic, moreover, do great injustice to the Bible. For they obscure its real value as a record of ancient speculations (Oh!) into the causes of things corresponding to those of other peoples than the Hebrews.—*From the Daily Chronicle, Oct. 17th, 1893.*

# THE EARTH—NOT A GLOBE—REVIEW.

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 6.

MARCH, 1894.

PRICE 2D.

## THE SUN STANDING STILL.

(Continued).

### THE LATEST EXPOSITION.

But our readers will naturally be anxious to know what is the final "explanation" given by the writer in question, who acknowledges that he had previously been "utterly bewildered with every attempt either to explain the miracle, or to explain it away." We shall let him speak for himself. He says;—

"I have now a FIFTH VIEW to lay before you, which appears to be both rational and simple." . . . "My *belief* is this: Joshua and his men having walked all night, as the 9th verse tells us, would be tired next morning, but God caused a great trembling to spread itself amongst the foe, and there was an easy victory. When the war had pursued the Amorites some distance, hailstones fell upon them and did much damage. At the approach to Beth-horon the hailstorm increased in fury; and Joshua, seeing the devastation produced, and being cognisant of the fatigue of his men, *prayed Heaven to let the hurricane go on till total and irreparable disaster was inflicted.*"

We refrain from saying all we think about this so-called "explanation," as the writer is evidently both sincere and devout; and he says that "it flashed across my mind many years ago, when I was on my knees." But we think it doomed to the same failure as the rest, and for similar reasons; it is not true to the sacred narrative. It reminds us of what the editor of the *Daily Chronicle* said of Dr. Geikie's book, *The Bible by Modern Light*. "He makes assertions which have the charm of novelty, but also the vice of inaccuracy." (See fuller remarks from the *D.C.* in another page). This is the case with the present attempt. We have no record that Joshua "prayed Heaven to let the hurricane go on." This is an assertion, not of the narrator, but of the "expositor." Joshua prayed for the *sun* to "stand still," not for the *hailstorm* to proceed, and we are told that "there was no *day* like that, before it or after it, that the LORD hearkened unto the voice of a man for the LORD fought for Israel." But to get rid of this fact our expositor says;



"The chapter (10th of Joshua) is made up of two accounts, the one historical the other poetical. The poetical extends from the 12th to the 15th verse. The rest is historical."

This is oracular and authoritative! Mr. Howard comes back after all to a "*Poetical Theory*," although such a theory was the first one he so conclusively rejected. This only proves the impossibility of explaining the account in harmony with modern science *on any theory*. In short *the narrative needs no explanation in itself; IT ONLY NEEDS BELIEVING!* And, as "all men have not faith," let anyone of those without try to prove, if he can, that the account is not in harmony with the facts of Nature. This would be straight forward and reasonable; but to wrest the Scriptures, to twist and torture their language until it is made to mean anything the writer wishes, is neither strictly honest nor truly scientific. The very attempt to do so only serves to shew the unconscious influence and injurious effect modern astronomy has had on the minds of otherwise good and honest searchers after truth. Only let the incubus of this superstition (and we use the word "superstition" advisedly as of something standing above, or outside, natural facts) only let this incubus be removed from their minds, and the skill such writers manifest might do credit to the expository science they affect; but while their minds are, consciously or unconsciously, enchained by the trammels of a false philosophy, imposed upon them while they were too young to question it, they will not only "wrest the Scriptures," as they do, but writhe as it were in the meshes of a critical snare evidently laid for us by the Arch-Deceiver of mankind. We have need to pray that our minds, and that the minds of our "Ministers," may be delivered from this "snare of the fowler." The miracle under consideration shews that God hears prayer, and answers it; but when He does *He* never flashes ideas or interpretations across the mind which are out of harmony with the general statements of that Divine Cosmogony revealed in his Holy Word.

"To the Law and to the Testimony; if they speak not according to this Word, it is because there is no light in them." Isa. 8 : 20.

#### JOSHUA CORRECTED.

Before concluding our paper let us briefly consider the validity of some of the reasons given for this novel interpretation. Firstly, the employment of a hailstorm was a "means already in operation, and in every way capable of securing the end in contemplation." This is so utterly beside the question that we dismiss it at once. We might deny the hailstorm itself on such flimsy grounds. Secondly, we are told that "the language of the inspired penman suits this theory, *and no other!*" We will content ourselves with putting a note of exclamation after that!

Then "It is poetical, and all poets are allowed some latitude in their descriptions." Our expositor ought to be a poet of no mean standing for he evidently claims a poet's privilege! He says the account is extracted from the Book of Jasher, which seems to have been made up of martial odes," intended to "develop patriotism and faith in God." If Mr. Howard had not prefixed the title "Rev." to his name, a title which his Master has practically forbidden (Matt. 23 : 8 vs.) we might have thought this the suggestion of a sceptic, that "faith in God" could be developed by the poetical recounting of a false miracle! But supposing that Mr. H's bare assertion that "the poetical portion extends from the 12th to the 15th verse" were true, what has he already told us respecting the genius of Hebrew poetry?

"I have sought all through the Bible and have not discovered one instance of a natural event being exalted into a miracle by any of its bards. Great occurrences which are wonderful in themselves are greatly adorned, but left free from all miraculous elements. . . . This enquiry into the veracity of Hebrew poetry has amazed me—made me feel how, contrary to the general view, in all their highest inspirations, the Bible bards kept a clear eye on sober truth—a remark, I think, which applies to the poets of no other nation."

Thus his own words are sufficient to answer the supposition that the account in question is a "poetical" figment. But we do not admit that three verses are poetical. They seem to us just as historical as the rest of the chapter, and ancient Israel believed them to be so. We believe that Mr. H. would never have objected to them as equally historical with the rest of the chapter were it not for the absurd idea that we are living on a vast globe, turning us all head over heels once every twenty-four hours, and so alternately bringing day and night. This appears from his further remarks. He says;

"The first remark I have to make upon these words, as here rendered, is that if the prayer had been answered the day would not have been lengthened. To lengthen the day the *earth* must either slow in her rotatory motion or stop it altogether; and Joshua, had he wanted more hours of light, should have said, 'EARTH pause in thy revolution upon thy axis, or go slower.' Thus you see our Versions take all the meaning out of Joshua's prayer. *Our View* shows its point and beauty."

This would really be amusing to Zetetics if the matter were not otherwise so serious, and the writer evidently so earnest. He calls poetry, Hebrew, and astronomy all to his aid. He says that the Hebrew word *dom* never means to "stand still." It may not be again so translated, not exactly, and yet it may have this meaning. We think it has. The root word is *damam*. The writer admits it is once translated "tarry" 1 Sam. 14 : 9. Although the word sometimes may be rendered *be silent*, this passage clearly shews it also means to *stand still*. It reads, "If they say unto us, *Tarry (damam)* until we come to you, then we will



*stand still (amad)* in our place." This latter word *amad* is the very Hebrew term used in Hab. 3:11, which again speaks of the sun standing still! Is this wrong also? We have faith in the translators to believe that they understood Hebrew as well, if not better, than the writer; and they, while giving various shades of meaning in the margin, give unmistakably the right meaning in the text, "Sun *stand* thou *still*," for we read "the sun *stood still (amad)* in the midst of heaven." v. 13. Mr. H. says the latter term means to *rise up*. But it can not mean this only, for Parkhurst gives the primary meanings, "*To stand, stand still, stay, remain.*" This Hebrew Lexicographer also says that "The Seventy generally render the verb by *istemi* to stand, and its compounds." As it may interest the reader we will give the translation from the Septuagint, shewing, how ancient Greek translators, untrammelled by modern astronomical theories, understood this passage;

"Then Joshua spoke to the Lord, in the day in which the Lord delivered the Amorite into the power of Israel, when He destroyed them in Gabaon, and they were destroyed from before the children of Israel. And Joshua said, Let the sun stand over against Gabaon, and the moon over against the valley of Aelon. And the sun and the moon *stood still*, until God executed vengeance on their enemies.

Italics of course are ours. Those who wish to pursue this point further will find the same Hebrew word (*amad*) translated "stand still," or its equivalent, in the following passages;—Josh. 3:8, 17; 10:13; and 11; 13; 1 Sam. 14:9; and 2 Sam. 2:23 and 28; &c.; as also in the remarkable passage referred to in Hab. 3:11. It plainly appears, therefore, unless the translators did not understand Hebrew, that "stood still" is a correct and frequent translation of *amad*; and doubtless it never would have been called into question as applied to the sun were it not for the baseless theories of modern astronomy. These are at the bottom of the whole contention. The passage had to be harmonized with a philosophical, or rather an *unphilosophical*, theory; so the translation must be altered to suit! As Mr. H. remarks;

"When once a theory takes hold it grows apace and wields a power over future ages that is seen in expositions, annotations, and translations . . . till the original modicum of truth is distorted or lost in the process."

And again, we quote with approval;—

"The Bible itself will have to be studied anew in its own light; and when this is done, and we get back to its grand and simple truths unmixed with false views from extraneous sources, we shall be delighted with what it is and what it has to tell us."

This is good advice, if followed. And amongst the grand and simple truths of the Bible will be found that the sun has motion (Psa. 19:4); that the earth (or *land*) rests on "foundations" (1 Sam. 2:8);

and that it is so established "that it should not be removed for ever." Psa. 104:5, &c., &c. Yet in spite of this good advice, and the fact that the Scriptures do teach the Plane system, the writer speaking about his new theory or explanation says;—

"Our theory disposes of an old infidel objection to revelation. Sceptics sneer at the Scriptures because as they say, they inculcate the Geo-centric system of astronomy, instead of the true (!)—the Helio-centric; and this miracle has ever been the prop of their charge. 'See,' they have said, 'when Joshua wanted the day lengthening, he commanded the sun and moon to stand still, thinking falsely (?) that they circled round the earth every 24 hours; whereas it is the *earth* (oh!) revolving round on her own axis, that makes day and night.' But *our theory* will put an end to this, and prove that Joshua knew what he was doing."

Vain hope! No mere "theory" will put an end to the infidel's sneer. Our plan is not to oppose *theories* or quibbles to the sneer of the sceptic, but *facts*; and then let him sneer if he can for shame. If the infidel can prove that water is convex, or that the earth really tumbles at all, land and water, topsy-turvy once every twenty-four hours, then he has a right to sneer at Joshua's ignorance; but if he cannot, and the pages of the *Earth Review* are open for any respectable effort, then *we* shall sneer at *his* ignorance, his lack of reasoning power, and his consummate folly for allowing himself to be duped out of Eternal Life over the simple and plain facts of Nature! We have a word also for the Christian. Why should you allow infidel theories respecting the universe, its form and its origin, to blind your eyes to the facts you see, or may see, around you, and to the harmonious teachings of that Divine system of Cosmogony revealed in Holy Writ? You need not attempt to make truth "reasonable"; it is reasonable, to the unfettered and really free thinking mind. Neither need you attempt to "explain" a miracle; it is above you. While the attempt to "defend" a miracle is puerile and absurd. A miracle is its own defence. All you have to do is to *believe* it, when attested. Defending a miracle is like a child defending a giant, or a fox defending a lion! But if you cannot believe your Bible, and if you are too indifferent or too ignorant to go into the proofs offered around you, then honestly join the infidel party, and prove the Bible is wrong in its Creation and its Cosmology, that is *if you can*.

We shall conclude our paper with a quotation from Josephus, a Jewish writer and historian who lived in the first century of the Christian era, and who was doubtless well acquainted both with the language of the Jews and the remarkable and miraculous history of Israel. Respecting the miracle in question he writes;—

"Joshua made haste with his whole army to assist them (the Gibeonites), and marching day and night, in the morning he fell upon the enemies as they were going up to the siege; and when he had discomfited them he followed them, and

pursued them down to the descent of the hills. The place is called Bethoron ; where he also understood that God assisted them, which He declared by thunder and thunder-bolts, as also by the falling of hail larger than usual. Moreover it happened that *the day was lengthened* that the night might not come on too soon, and be an obstruction to the zeal of the Hebrews in pursuing their enemies " . . . . Now that the day was lengthened at this time, and was longer than ordinary, is expressed in the books laid up in the Temple."

ANTIQU. B. V. C. I. S. 17.

In a note under this paragraph Mr. Whiston, the learned compiler of Josephus' works, while hesitating what explanation to give the miracle says ;

"The fact itself was mentioned in the Book of Jasher, now lost, Josh. 10 : 13, and is confirmed by Isaiah (28 : 21), Habakkuk (3 : 11), and by the son of Sirach (Eccles. 46 : 4). In the 18th Psalm of Solomon, ver. *ult.* it is also said of the luminaries, with relation no doubt to this and the other miraculous standing still and going back, in the days of Joshua and Hezekiah. 'They have not wandered from the day He created them, they have not forsaken their way, from ancient generations, unless it were when God enjoined them (so to do) by the command of his servants.' See Authent. Rec. part I, p. 154."

"Hear the just law, the judgment of the skies,  
He that hates truth shall be the dupe of lies ;  
And he that *will* be cheated, to the last  
Delusions strong as Hell shall bind him fast."

## STAR MOTIONS *versus* THE EARTH'S SHAPE.

(Continued.)

IN our last we shewed the inconsistency of deciding upon the shape of the Earth, by studying the motions of the heavenly bodies. There is little, or nothing, in common between them. Yet some astronomical books attempt to prove the earth is a globe by such logic and analogy as this ;—The planets are spherical, *therefore* the earth is a sphere ! We might as well say, a bubble is globular, therefore a clay pipe is the same ; or again, the sun and the stars are self luminous, therefore the earth and our "dull distant mountains" are shining ! It is pitiable to read the logic of some of the globularists. The heavenly bodies are evidently small, light, electrical, movable and imponderable ; while the earth is large, heavy, dull, generally flat, and most stable. The earth has never been proved to have the motions which the astronomical theory necessarily assumes it has ; while the stars, planets, sun and moon can be seen daily to move around us. In northern latitudes they all seem to be moving around one common centre, the north centre, commonly called the North "Pole." They all

move in the same direction ; rising in the east, culminating or "southing" in the south when on the meridian, and setting in the west, or on the right hand looking south. But they move with varying velocities according to their height above the earth. The "fixed stars" revolve a little faster than the sun, which therefore loses one revolution in a year. This marks the solar year ; and together with the fact that the sun moves in a spiral orbit, shews the reason why the sun is found in the different signs of the "Zodiac" during the twelve months of the year. The sun is left behind by the stars 30° each month. The moon, being nearer to the earth revolves still more slowly ; and as she gets left behind by the sun 12° or 13° daily, she thus passes through the twelve signs in a month, or moon-th. Neither stars nor planets are ever actually "stationary," much less "retrograde," as the astronomers teach ; but as the latter move with varying velocities, they sometimes appear so relatively to the signs or constellations. Hence they are called planets, or wanderers. The so-called "fixed stars" have always practically the same declination, and right ascension, except for very long periods ; but like the sun and the moon, moving in spiral orbits, the planets are sometimes found north of the equator and sometimes south. This is called their "declination" ; and as their actual heights probably alter with their declination they vary in their velocities. When a planet keeps up with the "fixed stars," it remains in the same "sign," or constellation, and the same "degree" or distance in that "sign," and it is then astronomically said to be "stationary" ! When a planet gains on the "fixed stars," and gets somewhat before them, the astronomers actually call it "retrograde" ! But when a planet loses on the stars, and gets left behind them a little in the daily round, it is supposed to be going in the contrary direction, and said to be "direct" ! Because of this "direct" motion, the planets are further supposed to revolve around the solar orb, though the "superior" planets never get on this side of the sun, nor the "inferior" planets on the other side of that luminary ; while the moon, although she acts like some of the planets, only moving more slowly and getting left behind daily more, is alone supposed to revolve around the *earth* ! Such is the astronomical jugglery and jumble ! As we have shewn the motions of the heavenly bodies are much simpler, the stars moving in circular orbits around and above the earth, and the sun, moon, and planets in spiral, or nearly circular orbits, alternately contracting and expanding from a mean or middle circle called the equinoctial, or celestial equator. But, as anyone can see in the north all the heavenly bodies move in the same general direction, from east to west. The cause of this motion, the *Primum Mobile*, is not known, except as it reveals both will and intelligence, and so points back to the First Great Cause of all things, THE ALMIGHTY CREATOR. As the Psalmist sang ;—

"The heavens declare the glory of God, and the firmament (solid dome, or "expanse,"—Job. 37:18), sheweth His handiwork. Day unto day uttereth speech and night unto night sheweth knowledge . . .

Their line (*rule*, margin) is gone out through all the earth, and their words to the end of the world. In them hath He set a tabernacle ("tent," Heb.) for the sun, which is as a bridegroom coming out his chamber, and rejoiceth as a strong man to run a race.

His going forth is from the end of the heaven(s) and his circuit (revolution) to the ends of it (them): and there is nothing hid from the heat thereof.

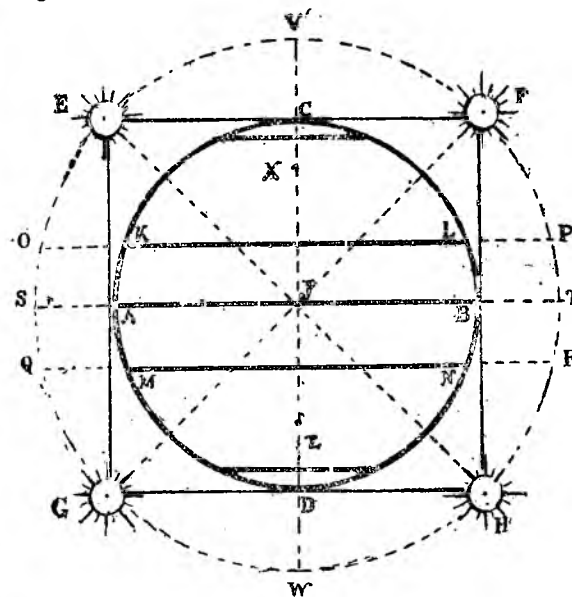
The Law of the Lord (Jehovah) is perfect, converting the soul; the testimony of the Lord is sure, making wise the simple." Psa. 19: 1—7.

Now, we do not in any way disparage actual and practical Science, but only that *theoretical* "science," falsely so-called, which exalts itself against God and His Word. In the face of this so-called science of the nineteenth century, we are not ashamed to own that our wisdom comes from above. If our friend, whose postcard started these articles, likes the wisdom of the world better, he may have it; but as a Christian he will be inconsistent, and perhaps suffer loss. With all the "Seventh Day Adventists," to whom he belongs, he believes in the literal observance of the Fourth Commandment—against which we have nothing to say—but here is where the inconsistency comes in on the part of this American sect, they do not believe in accepting literally the statements of the *second* precept of the Law, which declares that Heaven is "above" us, "the Earth beneath, and the Waters *under the earth*." Now where is the consistency of keeping the Sabbath as the memorial of God's Creation while practically denying that Creation in the Divine system of Cosmogony which the Creator has revealed? Is Exodus correct, and Genesis misleading? Is the Fourth Commandment all right and the Second all wrong? If the Protestant may reject the Cosmogony of the second command then the Romanist may reject its prohibition of idolatry. Yet our S.D.A. friends complain of other sects not keeping to the Law as well as to the Testimony! and as our *Satire* shews they more than complained of us when only privately pinning them down to the Word of God rather than to that of man, or woman either. *O Tempora! O Mores!* However, we will now proceed to examine somewhat into the cause of our friend's disturbance, and notice his objections, which he based upon certain

#### SOLAR PHENOMENA.

In the *Earth Review* for October, 1893, we published the statement of a friendly Zetetic in Auckland, New Zealand, that near the shortest day there "the sun rises E.N.E., and sets W.S.W." Times of rising and setting not stated. Another writer, an opponent to Zeteticism, has stated that "An observation was taken at Wellington Observatory, New Zealand, March 20th, 1885, and the point of sunset was ascertained to

be west  $15^{\circ}$  south," the sun setting at 6 p.m. He further says:—"Another known fact is, that on the equator at the equinox the sun sets due west." Again, referring to another observation, said to be taken at Auckland, N.Z., Dec. 20th, 1885, he writes; "So we learn that the sun sets nearly  $30^{\circ}$  South of West. We find by the Almanac that the sun sets (?) at 4.14 p.m., Dec. 20th." He then cynically remarks; Perhaps it might be claimed that the inhabitants of New Zealand were all *cross-eyed*; thus accounting for their seeing the sun in the south-west!" Let us see, G.W.B. ! Perhaps it is *you*, as you attempt to criticise "Parallax," who are so "cross-eyed." You write at least as though you were so. A hasty temper, the bias of early training, and "scientific" as well as religious prejudice are all poor factors in the elucidation of Truth. However to make it clear that such phenomena are not consistent with the globular theory we will refer to the following diagram—



Let A D B C represent the globe, A B the equator, and C D the "imaginary axis" upon which it is supposed to rotate, C being the North "pole," and D the South "pole."

Let the line K L extended to O and P, represent the tropic of Cancer,  $23\frac{1}{2}^{\circ}$  north of the equator; and Q M N R the tropic of Capricorn,  $23\frac{1}{2}^{\circ}$  south of the equator. These tropics represent the sun's position

in the heavens where it seems to turn back, and beyond which the sun is never seen vertically either north or south of the equator. See *Earth Review*, No. 3, article headed "Our Critics." On line C D, which may also represent a meridian, make two dots at X and Z merely to represent the latitudes, say at Leicester as being near the centre of England, or about  $52\frac{1}{2}^{\circ}$  north, and Wellington as being near the middle of New Zealand, or about  $40\frac{1}{2}^{\circ}$  south, and nearly on the opposite meridian, or about  $175^{\circ}$  E. Now as the point Z will be almost as far south of the line MN as this tropic is south of the equator, it is manifest that when, during

the longest day in NZ., the sun is rising at R, or setting at Q, a spectator on the "globe" would have to look considerably *northward* to see it. Therefore, if it be a fact that about Dec. 20th, the New Zealanders see the sun setting "in the south-west," then so much the worse for the globular theory, and those astronomical theories respecting the motions of light which go with it, and which are here found to be in such conflict with the facts! To enable a spectator at Z to see the sun anywhere near the "south-west" the sun would have to be placed somewhere near the point G, where it would also be just visible at the south "pole" D. But no astronomer ever ventured to assume that the sun gets so far south. Similar confusion to the globularist follows when we remember that the luminaries can sometimes be seen rising and setting far *north* of due east and west from the point X in our own latitudes. As we write this' article, Sunday, Jan. 20th, the moon is rising (4.5 p.m.) fully in the north west from here. Yet her declination is only about 24° north, while the parallel latitude of Leicester is about 28° still further north. We ought therefore, on the globular theory, to have to look for the moon at P in a *southerly* direction from X. As we have before intimated we think that the explanation of these things, as regards Zeteticism, will be found in connection with a new theory of the motions of light as it comes down to us from above. But whether this be the case or not, no theory can alter the proved fact that water is level and the earth therefore a plane. However, we wait for further proof of the various phenomena. All we are now concerned to shew is that the phenomena recorded are not as our correspondent imagined, proofs of the globular theory. This we think we have succeeded in shewing. It may be further proved by reference to

#### ANOTHER STRANGE FACT.

Another strange fact comes to light in this investigation, and one utterly at variance with the assumption that the world is spherical. It is based on the acknowledged fact that the horizon to an observer anywhere would always be a tangent to the sphere. What little refraction our opponents attribute to the atmosphere is only sufficient to allow the sun to be seen in the morning "eight minutes before he is above the horizon." See *Earth Review*, No. 5, p. 100, 2nd. par. Referring again to our diagram, to save the expense of another, let A C B D now represent the equator. Suppose the time is the vernal equinox when the sun is vertical over the equator, and the daylight lasts twelve hours. Let E be the position of the sun just rising upon a spectator at C. In six hours the sun would be overhead at the point V; and in six more it would be setting along the line C.F, at point F. That is, it would take the sun twelve hours to appear to travel from point E to

point F. Similarly it would take another twelve hours to reach H; twelve more to reach G; and another twelve to get back again to E. So that a spectator at C for every twelve hours light he would enjoy, would be left in the dark for thirty-six hours! And the whole day, consisting of day and night, would last forty-eight hours, with only one quarter of it daylight. This is just where the globular theory lands us, in at least three times more darkness than light! And if this theory were a fact instead of being only a pernicious assumption, the consequences would be much more disastrous. But the Creator knew His business better, and kindly gave us equal alternations of night and day. There is, therefore, in the very nature of things, a good reason why we may hold, with the gifted writer of an ancient epistle, that "The wisdom of this world is foolishness with God." The globular theory, with the evolutionary theories based upon it, must seem the same to all enlightened students of His Word and of His Works.

#### HARD NAMES.

"So many abusive epithets have at different times been hurled at me that I have grown somewhat indifferent to hard names. Never till 1894, however, have I been called a "globularist." This term I find applied to myself in the January number of the *Earth Review*—a good beginning for the New Year! However, it is some comfort to know that many besides myself are afflicted with globularism. A "globularist," it seems, is one who supposes the earth to be round, as opposed to a "planist," who knows it to be flat. The planists are now an organised sect, with a "Review" to propogate the tenets of their creed. Globularism, therefore, although for the moment in the ascendant, has received notice to quit. "It moves," said Galileo, the Arch-Globularist, on a memorable occasion, and up to a point he was right, but I doubt whether he appreciated how often it moves backwards." From *Truth(?) Jan. 18th, 1894.*

[Poor Labouchere! It is very hard of us to call him a "globularist," when he has to confess he is one; but not so cruel or "abusive" of him to call us "lunatics," while declining to allow us the opportunity of refuting the veracity of the epithet! Oh, no! The case is altered then! If he prefer the term we will call him a "globite" instead. But the *Earth Review* is perhaps making him ashamed of the belief he has entertained that he hangs head downwards from a "globe" for twelve hours out of every twenty-four! No doubt others are "afflicted" with the same mental belief, or disease; but whether this aggravate or only extenuate the malady, we will leave our readers to judge. And is this the only answer of "Truth" (?) to our challenge? Ed.]

## EVOLUTION.



When grovelling minds of little worth  
Forsake the Lord of heaven and earth,  
What dreams of fancy they imbibe ;  
They claim as kin the monkey tribe.  
They set all history at defiance  
And call their speculations science,  
Then try to shew the wondrous plan  
Of how the ape became a man.

All things to God men used to trace,  
And every species kept its place.  
But now we're told that men and worms  
Have only sprung from lower forms ;  
And when proud science lends her aid  
They'll tell us how these forms were made ;  
This thought is theirs—O happy notion !  
" Mind is but matter put in motion."

In works of art they see design,  
And own that wisdom did combine ;  
They say you may behold it in  
A watch, a mouse-trap, or a pin ;  
But all the flowers that scent the breeze,  
The fruits that grow upon the trees,  
The wondrous form and powers of man,  
Arose, they say, *without* a plan.

If science shews that man escapes  
And leaves the ranks of grizzly apes ;  
Then science may reverse the plan  
And prove the ape a fallen man.  
And this new species yet may boast  
And gain the tails their fathers lost ;  
As matter moves and beauty withers,  
Time yet may class them with their fathers.

No God they see in all creation ;  
They spurn the thought with indignation,  
Their main pursuit in life is pelf ;  
Their creed is—" *Always mind yourself.*"  
They say to saint and sage and ruffian—  
" The future state is but a coffin ;  
And when we pass beyond life's storms,  
We hope to be devoured by worms."

O charming hope for which they wait !  
What glory gilds their future state !  
If here they do but little good,  
Yet after death they're used as food,  
Then let this glowing prospect cheer,  
Take care of self while you are here.  
Grow fat and plump till latest breath,  
And you'll be useful after death.

From the " *Christian Commonwealth*," Jan, 25th, 1894.

D.S.

## IS THE WORLD ROUND ?

This question seems to be still agitating the Austrian Government, and more than one Austrian man-of-war that has called here lately has had an officer on board whose special commission was to make observations for the purpose of ascertaining the attraction of the earth in order thereby to arrive at the exact shape of the globe. An officer thus employed is on the Austrian steamer " *Fasana*," who, since the vessel's arrival, has spent a good deal of time at the National Bank, where a room was allotted him for the purpose of adjusting his instruments. An officer engaged on similar duty was on the " *Kaiserin Elizabeth*" the other day.—*Ceylon Independent*, Dec. 23rd, 1893.

## THE AGNOSTIC'S CREED.

" I believe in a chaotic Nebula self-existent Evolver of Heaven and Earth ; and in the differentiation of this original homogeneous Mass. Its first-gotton Product which was self-formed into separate worlds, divided into land and water, self-organized into plants and animals, reproduced in like species, further developed into higher orders, and finally refined, rationalised, and perfected in Man. He descended from the Monkey, ascended to the Philosopher, and sitteth down in the rites and customs of Civilisation under the laws of a developing Sociology. From thence he shall come again, by the disintegration of the culminated Heterogeneousness, back into the original Homogeneousness of Chaos. I believe in the wholly impersonal Absolute, the wholly un-Catholic Church, the Disunion of the Saints, the Survival of the Fittest, the Persistence of Force, the dispersion of the Body, and in Death Everlasting." —*From the New York Independent*.

## CORRESPONDENCE.

*All Letters sent to the Editor should be legibly written on one side only of the paper, and should have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. Stamped addressed envelopes ought to be enclosed for replies. Short pointed letters or articles preferred.*

*The Editor cannot, of course, be held responsible for the various opinions of his correspondents; nor can he enter into correspondence respecting articles, &c, held over or declined. Letters must be prepaid, and addressed to*

" *ZETETES*,"

*Editor of THE EARTH (not-a-Globe) REVIEW,  
Plutus House, St. Saviour's Road,  
Leicester, England.*

## NOTES.

*Portsmouth, E.B.*—Your letters, and many others, crowded out for lack of space. All cuttings sent should be labelled and dated.

*Belfast, J.A.*—Thanks for 2/6 for Free Literature Distribution fund. A Parcel was sent to Mr. G. T. Bolt, Southsea, who acknowledges the same with thanks to you.

*Toronto, W.B.*—Thanks for copy of Mr. Gleason's work. As you say it is a contribution to the subject, though lacking in literary perfection. It needs critical revision before the next edition is published. Could you get us a copy of his map, as this book was without one? We should be glad if any friend could supply us with a good large map.

*Doncaster, H.C.B.*—writes; "I am told that in the last edition of the *Encyclopedia Britannica*, in the article 'Astronomy,' by Proctor, there is an admission that the Plane Earth satisfies phenomena as well as the globular theory." We should be glad to receive the extract referred to if any friend can find it.

*Allegheny, W.G.M.*—Thanks for copies of your journal. We are glad to see you are boldly taking up the subject of "Natural and Bible Astronomy" in the *Herald of Glad Tidings*. There is much in your articles we approve of, but we have not yet seen any proof of what you call the "Enspherical form of the Universe." Let us keep to ascertained facts, and beware of the weakness of the astronomers for mere speculation. We are glad to notice our papers have been of some use to you.

*Santa Cruz, H.V.*—What proof can be offered that "winter is less severe at the South Pole than at the North?" or for the assertion that railway engines running north have "a tendency to run off on the east side; but when going south, to run off on the west side of the track?" Can you give instances, with the gradients and curves?

"*Lux*," of Nov. 25th, wrote; "Zetetes (Leicester).—Your article or letter has been overlooked; we shall try to attend to it, so please look out. We are sorry for delay." We have been "looking out" for about six months, and now we give it up. Perhaps this so-called anti-infidel paper prefers after all the infidel's globe before Natural and Biblical Cosmogony? Yet the editor promised (Aug 16th, 1893), to let our reply to D. Neild's article appear.

*Southwark.*—Glad to hear that lectures have been given, or papers read at Birmingham by Mr. James Naylor, and Mr. W. L. Hipwell; at Halifax by Mr. J. Shackleton; and in London by Mr. Isaac Smith of Halifax, the Secretary of the U Z S., and the Editor. Forward comrades!

"The Life of Christ Zetetically Considered" was never published.

*New Plymouth.*—W.M.R. Too late for this issue. Pamphlets sent for those received. ED.

## Letters to the Editor.

## AUDI ALTERAM PARTEM.

Dear Sir,—Again "Enquirer" has attempted a "demolition of Parallax"! This time experiment 14, "Earth not a Globe" page 57, is the subject of attack. I hope therefore you will find room for an outlandish Zetetic like me to shew this gentleman that he has again proved the non-existence of "earth—curvature," and consequently that the World is a vast irregular plane. How does this obscurantist try to prove, that "the essential statements in experiment 14 are false"? Does he like an honest enquirer go to Shooters Hill, and there test the experiment? Oh dear no! What does he do? Why Sir, he, in his own house (?) takes an arm chair, and sitting down calls for Thomas to bring him "an Ordinance Survey Map and straight edge." With these upon the table, this doughty "demolisher" proceeds to make measurements. This is done, and the services of Thomas are again requisitioned to remove the Map, &c., and bring the writing materials that he may write an "exposé" for the "Future," and try to shew that "Parallax invented his experiments." Now "Enquirer" asserts that "a line from Shooters Hill to Hampstead Hill will not catch the Cross on St. Paul's, as that object is fully half a mile to the S.W., of the line of sight." "Parallax" is thus "demolished." Ha, ha! But before the demolisher finally consigns "Parallax" to oblivion, a poor Hottentot presents himself before this editorially protected champion of the globular theory—who writes letters for a magazine in which he knows we are not allowed to reply to them—and demands a little delay while he is allowed elsewhere, i.e., in the more open pages of the E.R., to say a few words as to why his Ordinance Survey Map and straight edge "proof" cannot be other than "an elaborate and artfully designed imposture," and that his own "essential statements are absolutely false."

First—Because he has not tested the experiments as an honest "Enquirer" for truth ought to. Secondly—Because he seems to be ignorant of the difficulties attending the survey of the country, and the lines on which such surveys are carried out. It is acknowledged that,

"in surveying it is a difficult matter to carry out an accurate measurement of a perfectly straight line of any considerable length." It must also be borne in mind that to reduce the error to a minimum the number of measurements required in executing the survey of a country, a plan is adopted to measure one line. This is considered the "base line," and from each of the extremities of this, the angular distance is measured with a prominent object in the distance. Here then we see the basis upon which Ordinance Maps are made, and it clearly shews, to those whose sole object is truth, that as a test of such an experiment as "Parallax's" No. 14., the Maps are utterly worthless! Thirdly—Because a theodolite, if only turned? at the point of observation the one thirty-second of an inch, from the object viewed, would at a distance of twelve miles more than cover the "half a mile," this careless "Enquirer" asserts "Parallax" is wrong by! This shews the absolute necessity of carrying out the experiment as propounded by "Parallax." Fourthly—Because he himself says that "a line taken from Shooters Hill over the centre of St. Paul's will pass on to Willesden Green Station." Well, Sir, that is a Willesden-Green-Station proof that the earth is a plane, for a "line taken from Shooters Hill" that "will pass on to W. G. Station" cannot form a part of a curve! Fifthly, and lastly—Because in a letter to Mr. S., dated July 6th., 1892., referring to the sketches of the Bedford Canal experiment, he says, "I think there is enough to shew that no curvature was apparent. A dead level is all I can see from the sketches." But in the "Future" (Feb. 1893) referring to the same experiment he says, "the curvature you (Mr. Carpenter) deny is imagined there before you, and you know it to be curvature." Now Sir, whose "statements are utterly unworthy of credit," "Enquirer's" or "Parallax's"? Eh?

To gull the "Future"—what a blunder—"Enquirer" tells some tales of wonder; But "Hottentot" points now to "Jane," And says he's proved the earth a plane!

Auh Weusuh to such "Enquirer's!"

HOTTENTOT.



Darlington,

January 6, 1894.

Dear Friend in the Lord,—I am much obliged by the receipt of copy of E. Review, &c.

Our Blessed Lord referred to "Moses and the Prophets" in his conversations. No true disciple of the Son of God will, I dare to say, question His infallibility and Divine accuracy. His references cover Jonah and Joshua. The Bible has been ignorantly attacked by the merely natural man, with the rashness characteristic of him from his youth as regards its history, archæology, biology, geology and psychology, in all of which studies it has been proved correct even in minute details. And I am assured that the Astronomy of the Bible will eventually be proved correct.

What a spectacle to thoughtful observers the sight of great Astronomers standing by without a protest while engineers lay down railroads and construct waterways without paying any regard to the Astronomical dogma that the world is a globe.

In spite of the astronomical priesthood, the travelling world is very well satisfied to journey over these roadways constructed on the plan of a plane and level earth.

Many scientists refuse to believe the Bible. But the Book itself is a standing miracle! All the opposition and hatred of centuries has left unabated its interest and vitality. And yet these same persons inflated with the vigour and prescience of mortality, and daringly disdainful of their very limited capacity, demand that we shall believe *all their dicta* and dogma upon their authority alone, without reliable proofs.

The books and prophets of the Bible never contradict one another. The various books and prophets of Science are continually in conflict.

Not being an Astronomer, I cannot dispute on the more intricate details of that science. But I keep mostly now to one stone and sling. I ask my opponents to answer me on the question of the Moon's "reflection." I get them by questioning to allow that they hold the theory of the Moon being a globe; then that it shines by reflected light. I then refer them to the Laws of Light, of reflection, and radiation.

Of course they are bound to answer according to the Scriptures of Science. But these Scriptures of the Scientists aver truly that a convex surface such as the Moon's cannot throw off light, as she does, from every part of her face. Moreover, that a dull, dead body such as she is said to be, is not fitted to reflect either light or heat. Rather such a surface would absorb both the received light and heat. And again it is certain that whilst light is transmitted from the Moon to us, little or no heat is—which anyone can test for himself.

The signature at foot of letter p. 113 is not correct.

Yours faithfully,

EDWARD W. FORSTER.

#### A WRIT DE LUNATICO INQUIRENDO.

Dear Sir,—*"Truth"* says we are "lunatics," does he? (No! It is Mr. Labouchere who says so. ED.) Well it is not the first time the "public press" has given vent to such vindictiveness. But we speak the truth, when we tell "*Truth*" that we are not under the control of a "Board of Visitors," the same as those gentlemen at the Greenwich Observatory! Ah, "*Truth*"! I am going to speak the truth, and the source of my information is, the "*Astronomical Register*" for May 1872. "An observatory can never stand without some useful object, not only to prevent astronomers from going mad, as they have been apt to do since the time of Flamsteed, and hence the board of visitors." So much for the lunatics!

Evidently "*Truth*" has not read our "formidable rival's" teaching, and compared it with the truth of the Plane earth, or he would have found that the "rivals" have much in common. For instance Mr. Gillespie says, "they (the modern astronomers) are in a worse position by far than the heathen, who has no chance of knowing better. The sun, the moon, and the planets all prove that their system is false, the Bible and reason also teach us that it is false." Again, he asks; "can the mind of man take in or credit such an idiotic system?" Lastly, we find on p. 29., he quotes from the eminent

German philosopher, Dr. Shoenper, who says, "the assumption that the planets are inhabited Worlds, or that the Earth is a Planet revolving round the Sun, is void of any probability, and will soon have to pass into the realms of fiction. . . . I curse this modern theory of Cosmogony, and hope there may appear in due time some scientist of genius who will pick up courage enough to upset this universally disseminated delirium of lunatics."

And now Mr. Editor, let me say that our "formidable rival" who still believes that the earth is a globe, asks the same question as we ask;—"Can any man in his sober senses believe that the earth could fly through space at the rate of *one thousand miles a minute*? Could the moon keep her constant path round the earth at 237,000 miles distant, if the earth was flying at this terrific speed? *Oh, what dupes*!" So say we, and the attention of the editor of the "*Review of Reviews*" is called to the above.

BALAAM'S ASS.

Ontario, Canada,

January 15th, 1894.

Dear Friend,—Please accept my thanks for the papers and two copies of the "*Earth Review*."

The report of Mr. Runciman's lecture in New Zealand is gratifying. He dealt with the question in a discreet and straightforward way.

I notice a letter on page 112 from H. C. Bowker, M.A., of Doncaster, of some importance. He refers to Parallax, p. 96 and 97. "The direct distance from Valencia, (Ireland), to Cape Town, (South of Africa), is 1,164 miles; this must be a mistake." Yes—it is a mistake. Mr. John Hampden gives the Equatorial circumference as 25,000 miles—and he states in a letter to me that he had found several minor mistakes in Parallax in regard to distances. Now if the Equatorial circumference is 25,000 miles, the radial distance from the North Centre to Equator must be 3,979 miles. Parallax gives the radial distance from North Centre to Valencia correctly, (I think) 2,556 miles; but the distance he gives from Valencia to Cape Town is incorrect. It is not 1,164 statute miles, but 2,390 miles. Mr. Bowker says, "I am sure that one of

the most pressing matters that requires settlement in this controversy, is the measurement of a degree of longitude at two different latitudes South of the Equator." Strange this is a matter that has occupied my mind for some time. During my leisure, I have been trying to work this out from the variation of daylight at different latitudes. I begin to see my way for determining the circumference at the latitude of Auckland 37° S., and at the latitude of 45° S., from the difference of daylight between Ontario 45° N., and Auckland 37° S. . . . However, this Copernican falsehood is doomed. It will not be tolerated much longer. When the public get a little more light they will demand an alteration in the school system as far as physical geography is concerned.

Yours respectfully,

JNO. T. LAWSON.

Toronto, Jan. 11th, 1894.

My dear Brother,

I enclose a cutting from a paper in N.Y. State, shewing that a Mr. M. C. Flanders is on the war-path against popular astronomy, &c. He carries apparatus, I understand, in order to demonstrate his positions to the eyes of his hearers, as well as appeal to their minds through their ears. I wish there was a cheap edition of "*Parallax*" out, which he could recommend to his his hearers rather than Mr. G's book. I have three copies of *Parallax*; one for myself, which has been rebound with many additions and illustrations, and two which are often out on a loan, from reading which several intelligent persons have quite renounced the old views. I think it is important that *Parallax's Statements* respecting that wager between Wallace and Hampden, should be added to my new edition, for so many seem to have heard of the wager who know nothing about the way in which it was said to have been won, though under false pretences.

In your January number, your correspondent "H" seems to be very much in the condition of Mr. E. When I saw him last, he was talking to me about the same matter, and I answered him very much after your style, referring him to the *one* superlative proof-test of water, as the proper standard of



appeal, and not *stars* in the matter of the Earth's form, &c. Mr. E. has lately joined the Astronomical Society of Toronto, and I suspect the stars have dazzled his mind for awhile; though he is a man of good understanding.

In January number 1894, the reports of Bruce and Donald, are *most important*. It is a point in the Southern aspect upon which I am much accustomed to dwell in argument, and it always carries weight with the thoughtful, that the *remarkable differences* between the south and north view could not exist under the spherical and rotary principle of the earth, were such true. If the Geog. Society were only in earnest to settle the vexed question which is confronting them every now and then, it appears to me the question could be easily solved in some such manner as this:—let two parties be formed, one to investigate the matter at the North, and the other at the South. Let a given parallel at each point, &c., the line of investigation, say 70° or 65° S. is so trying to seamen in colds and storms, &c., each to pursue its parallel from a given longitude in a direct easterly or westerly course over sea and land till it reached that given longitude again, and shewed *the number of miles* traversed, and then compare the results of difference or similarity. It must, as inevitably, I think, shew the true condition geographically, and mathematically, as would two circles drawn, the one near the hub, the other near the rim of a wheel.

Could not your "*Sundial*" be printed in E.R. with a *diagram*? It might induce many perhaps to try the question. Well brother, the Lord sustain thee in the fight for Truth revealed, whether in Nature or the Word—and for every ray of Light received, may we receive seven rays of Love to enable us to spread abroad and use the light aright!

Yours sincerely in Christ,  
W. BROOKMAN.

Baltimore, U.S.A., Jan. 29th.

SIR,—If ever a useless task were given to a man, surely such a task is given to me, when I am asked to recount the facts of the Bedford Level Experiments of 1870! The past 24

years' experience has convinced me that the public has no desire to learn that which is out of harmony with what they have been taught. The whole affair lies in a nutshell, and people are afraid to look inside, so intent are they in looking all round the outside where the thing is *not*. It is simply this:—A six-mile stretch of standing water was proven by those experiments to be *LEVEL*; and all the trickery in the world will never succeed in proving it *convex*! *Alfred R. Wallace* who claimed the winning of the wager, and pocketed the money on the 1st. of April, 1870, should be called upon loudly and persistently to *explain* his case. He dare not so much as attempt it. Were he to try to do this, without subterfuge and banter, it would be the finest demonstration in favour of the *plane earth* that could be wished for! Here is what is inside the "nutshell"—Six miles of standing water presents a certain configuration of surface—what is that configuration—is it level or convex? One would suppose it were the greatest puzzle of modern times! why, if people had nothing to guide them but the commonest of common sense, it need not remain unsolved five minutes; and, in putting pen to paper at this time, the conviction is forced upon us that we are either telling people who *know*, or those who *do not want to know*! What a disgrace to science that its victims have not pluck enough to see for themselves, and if Mr. Wallace has not courage enough to face his opponents and throw off the odium that attaches to his name, do it for him, *Six miles of water bulged up in the middle*; and precisely the same appearance presents from either end—a continuous straight line!! Surely, Mr. Editor, it would be a work of supererogation to attempt seriously to *explain* this in the year, 1894. I did this in 1871, in a 32 p.p. pamphlet (1/-) which I advertised in the *London Daily Telegraph* until that paper was threatened with legal proceedings, and therefore, refused my advertisement, (Much better would it have been for Mr. Wallace to defend himself!) This publication was entitled "Water not Convex: The Earth not a Globe! Demonstrated by Alfred R. Wallace, Esq., F.R.G.S., &c, on the 5th of March, 1870, by experiments conducted on the old Bedford Canal, near Downham Market, Norfolk."

What was proven by that pamphlet may be proven as long as the world lasts, namely, that standing water is level; but if you would like any further particulars—to aid someone's common sense—I shall be happy, Mr. Editor, to be your obedient servant,

WM. CARPENTER.

[We certainly think it was Mr. Wallace's duty to publish a statement

shewing how he thought he had fairly won the wager. This would not only have tended to clear his character, but would have been a service rendered, and due to the public from him, as the champion of the globular theory. The Earth Review is open to him for this purpose. In the meantime our readers would doubtless be glad of the further promised statement of Mr. Carpenter. Ed.E.R.]

## RENEWAL OF ANTARCTIC EXPLORATION.

[Extracts from a Paper read at the Meeting of the Royal Geographical Society Nov. 27th, 1893, by John Murray, Ph.D., L.L.D. of the "Challenger" Expedition].

"Herodotus tells us that, about six hundred years before Christ, Phœnician sailors reported that, in rounding Africa to the south, they had the sun on their right hand. 'This for my part,' says Herodotus, 'I do not believe; but others may.' This observation as to the position of the sun is, however, good evidence that the expedition of Necho really took place." . . .

"Pomponius Mela who lived in the first century of our era" . . . "held, like most of his predecessors, that the habitable world of Europe, Asia, and Africa, formed a single island surrounded by an all-encircling sea."

[After describing the first circumnavigation of the earth the paper unwarrantably proceeds;—Ed.]

"The sphericity of the Earth, the existence of antipodes, were no longer scientific theories, but demonstrated facts. The loss or gain of a day in sailing round the world, together with a multitude of other unfamiliar and bewildering facts, struck the *imagination*, and altogether the effect of these startling events was without parallel in the history of the world. The solid immovable earth beneath men's feet was replaced by *the mental picture* of the great floating globe swung in space, supported by some unseen power." . . .

[Only a "mental picture" drawn by the "scientific imagination." If we sailed round an island we might draw the same "mental picture" of it, but would it be true to fact? Ed].

Cook reached latitude 71° 10' S., in longitude 106° 54' W., and here he probably saw the ice-barrier and mountains beyond. He believed there was a tract of land towards the South Pole extending further north in the Atlantic and Indian Oceans than elsewhere, and says—"It is true however, that the greatest part of this southern continent (supposing

there is one) must be within the Polar circle, where the sea is so pestered with ice that the land is thereby inaccessible. The risk one runs in exploring a coast in these unknown and icy seas is so very great that I can be bold enough to say that no man will ever venture further than I have done, and that the lands which may lie to the south will never be explored. Thick fogs, snow-storms, intense cold, and every other thing that can render navigation dangerous, must be encountered, and these difficulties are greatly heightened by the inexpressibly horrid aspect of the country, a country doomed by nature *never once to feel the warmth of the sun's rays*, but to be buried in everlasting snow and ice." . . .

"Two navigators have, however, ventured further than Cook; Weddell in 1893 penetrated to 74° S., but saw no land. Sir James Clark Ross in 1841 and 1842 reached the 78th. parallel, and discovered Victoria Land. These three explorers, Cook, Weddell and Ross, are the only ones who have passed beyond the 70°th parallel of south latitude."

"In Jan. 1841, after passing heavy pack-ice far to the south of New Zealand, Ross discovered Victoria Land, consisting of mountain ranges from 7,000 to 12,000, and 15,000 feet in height. To the east he found open navigable water with off-lying islands, on two of which—Possession and Franklin Islands—he landed. This bold coast was traced for 500 miles to the south, where it terminated, in latitude 78° S., in the volcanic cones of Mounts Erebus and Terror, Mount Erebus at the time vomiting forth flame and lava from an elevation of 12,000 ft. Glaciers descending from the mountain summits filled the valleys and bays of the coast, and projected several miles into the sea. It was impossible to enter any of the indentations or breaks on the coast where in other lands harbours usually occur. On some days the sun shone forth with great brilliancy from a perfectly serene and clear sky of a most intense indigo blue, and the members of the expedition gazed with feelings of indescribable delight upon a scene of grandeur and magnificence beyond anything they had before seen or could have conceived.

From the eastern foot of Mount Terror, Ross found a perpendicular wall of ice from 100 to 120 feet in height, extending away to the east, through which, as he says, there was no more chance of sailing than through the cliffs of Dover. He traced this ice barrier in an east and west direction for 300 miles; and within a mile of it he obtained a depth of 260 fathoms, with a fine soft mud at the bottom. In the following season Ross was not successful; for weeks he was a prisoner in the pack-ice." . . .

"To my mind there seems to be abundant evidence that there exists in this region a vast extent of true continental land, the area of which

is greater than that of Australia, or nearly 4,000,000 square miles. Of all the bold southern explorers, Ross and D'Urville are the only two who have set foot on land within the Arctic circle." . . .

"A few months ago I bade good-bye to Nansen, and said I expected within two years to welcome him on his return from the Arctic; but I expressed some doubt if I should again see the *Fram*. 'I think you are wrong,' was the reply; 'I believe you will welcome me on the very same deck, and, after my return from the Arctic, I will go to the South Pole, and then my life's work will be finished.'"—From the *Geological Journal, Jan., 1894*.

### SCIENTIFIC DOGMATISM.

"Mr. Tyndall resigned in 1887 the Professorship at the Royal Institution which he had held for more than thirty years. . . . He never had any doubt about anything, from Home Rule to spontaneous generation, from the composition of dust to the origin of things. . . . But while Professor Tyndall, the brilliant lecturer, the luminous expositor, the intrepid climber, the pugnacious controversialist, the genial and amiable companion, was in many respects an interesting personage, no part of his character would repay study so well as the scientific dogmatism in which it was all steeped. Dr. Arnold protested half a century ago in his entertaining, if not very practical, notes on Thucydides, against what, as a philological student, he discerned to be a tendency of the times. "It is not to be endured, he said, that scepticism should run at once into dogmatism, and that we should be required to doubt "with as little discrimination as we were formerly called upon to believe." Dr. Arnold was of course referring directly and immediately to the tampering of commentators with the text of the Greek historian. But the symptom which he observed has spread into other spheres, and for the old tyranny of the Church there has been substituted the despotism of the laboratory. The "delight of dealing with certainties" described by an accomplished man of letters, who made an hasty plunge into the "Principia," is a high form of mental enjoyment. But it is rather a dangerous guide through the maze of conflicting probabilities, from which even the sacred College of Science has not yet succeeded in delivering the human race. . . .

Mr. Balfour wrote a book which is not nearly so well known as it ought to be. The "Defence of Philosophic Doubt" is dry and unattractive in form. But it is acute and ingenious in substance. It would be a more agreeable work if it were written in literary English. It would be a more candid one if it mentioned the name of David Hume. It is, notwithstanding these drawbacks, a valuable antidote to

the pretensions of modern science. In it Mr. Balfour, one of the few living Englishmen with a real aptitude for philosophy, turns against the exaggerated claims of science the arguments formerly employed with so much vigour against the exaggerated claims of theology. "It is useless," he says in effect, "to tell me that your conclusions are true because they are universally accepted. What is the ignorant impression of the 'unthinking multitude really worth'?" . . . Mr. Balfour is fond of paradox, and he may press his theory too far. But at least he deserves credit for pointing out that the infallibility of science rests on no surer foundation than any other form of orthodox opinion. The greatest names in scientific history cannot be cited to support the doctrine that a knowledge of physics, however accurate and extensive, entitles its possessor to lay down the law on final causes and the origin of things. In his famous address at Belfast nearly twenty years ago, Professor Tyndall declared that matter contained the power and potency of every form of life. If this phrase was more than empty rhetoric it implied that Professor Tyndall knew how the world came into existence, and how life began. Mr. Darwin, the greatest man of science since Newton, if not since Aristotle, put forward no such assumption. In humble and dignified language he explained that his marvellous generalisations with reference to the origin of species and the decent of man began, as they ended, with a living creature. He traced man to the marine ascidian. The marine ascidian he did not pretend to trace."—From *The Daily News*, Dec. 5th, 1893.

[Could anyone spare the Editor a copy of Mr. Balfour's book, *The Defence of Philosophic Doubt*? ED.]

## A CHURCH TAX.

[COMMUNICATED.]

MR. EDITOR.—I do not for a moment suppose—although your experience is decidedly extensive—that you ever knew of a case in which a tax, of no mean proportion, was imposed on a Sunday morning. It was in an aristocratic portion of the city, too: near where the fountains play in summer time. You wouldn't think it could be in a church, where you go to hear the simple gospel of Jesus Christ held up before you, or some plain truth brought forward from the good old book, but, indeed, it was; and in Mount Vernon Church, on Sunday morning last, there was such a taxing of the people—No, we are not thinking of the nickles and dimes as they chinked into the plates, Oh, no! That tax was a trifle! The Rev. Gentleman, from a pile of M.S., read a scientific lecture on the destruction of Mother Earth at the final day that must have taxed the *credulity* of the Bible student (if there be any such to be found now-a-days) to the utmost capacity! The talk of rolling and

blazing suns and fiery comets and a host of solar systems with their rotating and revolving planets—like our dear "little" earth!—all, all, all becoming jammed up together in one vast nebula in the closing scene was undoubtedly appalling and terribly tragic to the hearer whose "education" fitted him for its reception, and for whom the prophecies of a modern French savant must have been a sweet morsel—as they were hurled down the throats of the poor "educated" people at Mount Vernon! Truly, what is one man's meat is another man's poison; and we know of one fellow who was so completely sickened by it that to wait for the benediction would have been too much for him—he had to go out! "Let the worlds crash if they want to!" was one elegant outburst of the minister who is nothing for such a congregation as *his* if he be not SCIENTIFIC! Let the worlds crash! If it were permissible to stand up and ask a question in church, the sick man would have asked, "What worlds!" In vain would the Rev. scientist turn the leaves of his Bible for an answer! The Book is virtually buried under a heap of scientific lumber! . . . If a scientist has never heard of "PARALLAX," of England, he stands, confessedly, an ignorant scientist; and every scientist who has read that author and fails to take action in the premises—well, it were better for his soul had he remained ignorant! The scientific world knows full well—not a man will dare to deny it, in response to this letter—that if they did NOT hold their peace as they are doing to day they would *knock out that peg*, about which the Madison Square minister spoke, and to which he drew pointed attention! It is coming! The crash will be terrific! Galileo—turning the Bible upside downwards was a mere bagatelle to the task of putting the Book once more in its true position! Anarchists and Socialists in league against the Bible, shall we have also the Methodists, Adventists and Clergy? Is there not more *genuine* infidelity in professing to love that which you suffer to lie unheeded even on a pulpit desk than there is with those who just don't want the thing at all? Those who are called by Dr. Talmage the "infidel scientists" have the devil at their back, and all the powers of darkness will be used to give the devil the victory! Silence! ye scientists, a little longer, as silenced you surely shall be. Let the old folks depart in peace: then the battle! Catholics—far-seeing folk as they are—*now* enjoined by the Holy Father to study the Bible, will do it that *their* power should be felt; (but they will have to take out the word "globe" and restore the plain words of the original text: for, "globe of the earth" is nonsense, anyway,—See *Isaias 40:42*, Douay version). Yes, *they* will join in the contest, and the Bible will come out in the end as the true scientific text-book; because it will be known to the people, as it is now known to the scientists, that the only peg which retained a monstrous structure in position was the theoretical, "heretical and damnable" peg—that the earth is a globe and flies

around the sun! Then, and not till then, shall we find the Bible an open Book in the churches, and we may go to the church of the people without being TAXED!—From *The (Single) Tax Journal*, December 20th, 1893.

### ROMAN CATHOLIC REFUTATIONS OF GALILEO.

From the mass of books which appeared under the auspices of the church immediately after the condemnation of Galileo, for the purpose of rooting out every vestige of the hated Copernican theory from the minds of the world, two may be taken as typical. The first of these was a work by Scipio Chiaramonti, dedicated to Cardinal Barberini. Among his arguments against the double motion of the earth may be cited the following :—

“Animals, which move, have limbs and muscles; the earth has no limbs or muscles, therefore it does not move. It is angels who make Saturn, Jupiter, the sun, etc. turn round. If the earth revolves, it must also have an angel in the centre to set it in motion; but only devils live there; it would therefore be a devil who would impart motion to the earth. . . . The planets, the sun, the fixed stars, all belong to one species—namely, that of stars—they therefore all move or stand still. It seems, therefore, to be a grievous wrong to place the earth, which is a sink of impurity, among the heavenly bodies, which are pure and divine things.”

The next, which I selected from the mass of works, is the *Anti-Copernicus Catholicus* of Polacco. It was intended to deal a finishing stroke at Galileo's heresy. In this it is declared: “The scripture always represents the earth as at rest, and the sun and moon as in motion: or, if these latter bodies are ever represented as at rest, scripture represents this as the result of a great miracle. These writings must be prohibited, because they teach certain principles about the position and motion of the terrestrial globe repugnant to holy scripture and to the catholic interpretation of it, not as hypotheses but as established facts. . . . It is possible to work with the hypotheses of Copernicus so as to explain many phenomena. . . . Yet it is not permitted to argue on his premises except to show their falsity.”—*Dr. Andrew D. White, “Popular Science Monthly.”*

“I learnt as my first great lesson in the inquiry into these obscure fields of knowledge never to accept the disbelief of great men, or their accusations of imposture or of imbecility, as of any weight when opposed to the repeated observation of facts by other men, admittedly sane and honest. The whole history of science shows us that whenever the educated and scientific men of any age have denied the facts of other investigators on *à priori* grounds of absurdity or impossibility, the deniers have always been wrong.”—Prof. Alfred R. Wallace.

# THE EARTH—NOT A GLOBE—REVIEW,

“To Him that stretched out the Earth above the Waters; for His mercy endureth for ever.”—Psa. 136 : 6.

No. 7.

MAY, 1894.

PRICE 2D.

PROFESSOR TOTTEN

AND

JOSHUA'S LONG DAY.

SINCE publishing our pamphlet on the *The Sun Standing Still*, a friend has lent us a copy of a larger pamphlet by Professor Totten, of New Haven, entitled *Joshua's Long Day*. It is a remarkable production, and serves generally to shew the wonderful accuracy of Bible Chronology. It is on the same lines as the writings of Mr. Dumbleby in *All Past Time*, a gentleman whom the editor of *The Earth Review* has had the pleasure of meeting more than once in London. But while these gentlemen both make good Chronologists, we are sorry to have to point out their inconsistency as Cosmologists and as Christian writers. They hold with modern Astronomers, infidels, and evolutionists of all kinds, that the earth on which we live, is a rotating “globe,” revolving about the sun, and dashing onwards through “space” quicker than a flash of lightning. This is not only contrary to natural appearances, but is also contrary to the Bible doctrine that the earth rests upon “foundations,” and is established so fast that “it cannot be moved.” One or other of these views must be false. What is the use of proving that Bible Chronology is correct if Bible Cosmology is all wrong? And where is the consistency of defending one part of the Sacred Writings, while practically denying another? According to inspired writers, Bible Cosmogony is at the basis of all God's dealings with, and revelation to, his creatures. Hence it is placed in the forefront of the Holy Scriptures, in the very first chapter of Genesis. And as Mr. Totten says;—

“It is the Bible that Atheists and Infidels attack—the Old Testament chiefly—for they are logical, and perceive that if the foundation goes, the super-structure cannot stand, no matter how eloquently it can be clothed in Agnostic sermons . . . It will not do to doubt the universality of the Flood, and ask men to accept a Saviour who alludes to it . . . If the story of Eden and the Deluge, of Jericho and Joshua are myths or fables, and

around the sun! Then, and not till then, shall we find the Bible an open Book in the churches, and we may go to the church of the people without being TAXED!—From *The (Single) Tax Journal*, December 20th, 1893.

### ROMAN CATHOLIC REFUTATIONS OF GALILEO.

From the mass of books which appeared under the auspices of the church immediately after the condemnation of Galileo, for the purpose of rooting out every vestige of the hated Copernican theory from the minds of the world, two may be taken as typical. The first of these was a work by Scipio Chiaramonti, dedicated to Cardinal Barberini. Among his arguments against the double motion of the earth may be cited the following :—

“Animals, which move, have limbs and muscles; the earth has no limbs or muscles, therefore it does not move. It is angels who make Saturn, Jupiter, the sun, etc. turn round. If the earth revolves, it must also have an angel in the centre to set it in motion; but only devils live there; it would therefore be a devil who would impart motion to the earth. . . . The planets, the sun, the fixed stars, all belong to one species—namely, that of stars—they therefore all move or stand still. It seems, therefore, to be a grievous wrong to place the earth, which is a sink of impurity, among the heavenly bodies, which are pure and divine things.”

The next, which I selected from the mass of works, is the *Anti-Copernicus Catholicus* of Polacco. It was intended to deal a finishing stroke at Galileo's heresy. In this it is declared: “The scripture always represents the earth as at rest, and the sun and moon as in motion: or, if these latter bodies are ever represented as at rest, scripture represents this as the result of a great miracle. These writings must be prohibited, because they teach certain principles about the position and motion of the terrestrial globe repugnant to holy scripture and to the catholic interpretation of it, not as hypotheses but as established facts. . . . It is possible to work with the hypotheses of Copernicus so as to explain many phenomena. . . . Yet it is not permitted to argue on his premises except to show their falsity.”—*Dr. Andrew D. White, “Popular Science Monthly.”*

“I learnt as my first great lesson in the inquiry into these obscure fields of knowledge never to accept the disbelief of great men, or their accusations of imposture or of imbecility, as of any weight when opposed to the repeated observation of facts by other men, admittedly sane and honest. The whole history of science shows us that whenever the educated and scientific men of any age have denied the facts of other investigators on *à priori* grounds of absurdity or impossibility, the deniers have always been wrong.”—Prof. Alfred R. Wallace.

# THE EARTH—NOT A GLOBE—REVIEW.

“To Him that stretched out the Earth above the Waters; for His mercy endureth for ever.”—Psa. 136 : 6.

No. 7.

MAY, 1894.

PRICE 2D.

## PROFESSOR TOTTEN AND JOSHUA'S LONG DAY.

SINCE publishing our pamphlet on the *The Sun Standing Still*, a friend has lent us a copy of a larger pamphlet by Professor Totten, of New Haven, entitled *Joshua's Long Day*. It is a remarkable production, and serves generally to shew the wonderful accuracy of Bible Chronology. It is on the same lines as the writings of Mr. Dimbleby in *All Past Time*, a gentleman whom the editor of *The Earth Review* has had the pleasure of meeting more than once in London. But while these gentlemen both make good Chronologists, we are sorry to have to point out their inconsistency as Cosmologists and as Christian writers. They hold with modern Astronomers, infidels, and evolutionists of all kinds, that the earth on which we live, is a rotating “globe,” revolving about the sun, and dashing onwards through “space” quicker than a flash of lightning. This is not only contrary to natural appearances, but is also contrary to the Bible doctrine that the earth rests upon “foundations,” and is established so fast that “it cannot be moved.” One or other of these views must be false. What is the use of proving that Bible Chronology is correct if Bible Cosmology is all wrong? And where is the consistency of defending one part of the Sacred Writings, while practically denying another? According to inspired writers, Bible Cosmogony is at the basis of all God's dealings with, and revelation to, his creatures. Hence it is placed in the forefront of the Holy Scriptures, in the very first chapter of Genesis. And as Mr. Totten says;—

“It is the Bible that Atheists and Infidels attack—the Old Testament chiefly—for they are logical, and perceive that if the foundation goes, the super-structure cannot stand, no matter how eloquently it can be clothed in Agnostic sermons . . . It will not do to doubt the universality of the Flood, and ask men to accept a Saviour who alludes to it . . . If the story of Eden and the Deluge, of Jericho and Joshua are myths or fables, and

not literal facts, then to the still *rational* mind all that follows them is equally so, and faith, lost in those who foretold his Advent, can never be savingly and logically found again in Christ and his apostles."

This is well said, but it applies to those who deny the fact that it was the *Sun*, and not the earth, which stood still at Joshua's command, as well as applying to those who deny the "Longer *Day*" of Joshua. As professor Totten has no doubt a logical mind we are sure he must see this, and we trust he may also have the grace to acknowledge it. Referring to Smith's Old Testament History, he says;

"Dr. Smith does not seem to credit the chief event of this battle, since he says, 'The miracle must be understood as *phenomenal*, namely, that the sun and moon *appeared* to the Israelites to stand still' (!?) Now this is simply begging the question, and begging with it every other miracle mentioned in the Bible . . . Upon the basis of the generally accepted 'poetical version' of this incident we must prefer the out-and-out position of Renan himself, as given in his *History of Israel* (q.v.), and with it, were we honestly convinced of the reliability of that method of treating the Scriptures, we would logically go to the full extreme and reject its Divine Inspiration *in toto*. But the wise man cannot do it; and so to conserve his reason, he is forced to go down into the depths of all things until the truth shines out—convinced that it is there, if but with patience it be sought."

This might have been written for the EARTH (not-a-globe) REVIEW, it applies so well to our contention that the earth has really no such motion as that which the astronomers ascribe to it; but, if the Bible is not correct in attributing motion to the sun as well as to the moon then the professor is bound to give up his belief in the Divine Inspiration of the Scriptures. There is no logical escape from this conclusion. He must give up his belief either in the absurd theory of the earth's rotation, or his faith in a Divinely revealed Cosmogony.

Mr. Totten proceeds to verify the elements of the question, with a view of shewing that Joshua's "Long Day" consisted of the 23 h. 20 m. added to the regular day of 24 hours which marked the day of the winter solstice of the year 2555 a.m., or year of the world, "the autumnal equinoxial beginning of which year was 3333 solar years ago, reckoning from Sunday, Sept. 22, 1889, A.D." Thus the "Long Day" would consist of 47 hours and one-third, or nearly two full days, and we are informed that it was so reckoned in the calendars of the time, that is as two days all but forty minutes. These forty minutes he proceeds to shew were afterwards rectified or made up in the time of Hezekiah, the twelfth king of Judah, at "the instant of the Autumnal Equinox, in the year of the world 3293," at high noon, just before 12 o'clock as we reckon, when the shadow went back ten degrees. This is very interesting, and if accurate will serve to shew how the Chronology of the Bible may be as scientifically demonstrated as its Cosmogony, both being equally inspired. We cannot find space here to shew our readers how this is

accomplished, but we will just point out to the professor and his followers where we think there may be some inaccuracy in respect to the absolute date given for Joshua's "Long Day." This, of course, will not invalidate the fact that systematic Chronology proves a day was actually lost in the calendar after the time of Joshua's invasion of the land. We only doubt whether Mr. T. has found the exact year and day when the sun did stand still.

Professor Totten seems to assume that the moon was in conjunction with the sun on the day of the battle at Bethoron. This is contrary to the general "tenor of the record," which evidently implies that Joshua saw the moon going down in the west over Ajalon, as well as the sun "in the midst of heaven," over Gibeon. Mr. T. says;—

"The moon was therefore *recorded* (?) as about 8' west of the sun, and had the relative motion of the three bodies' (two?) not been arrested, she would have come into conjunction (i.e. become 'new') in about 13 minutes of time."

Now, as Ajalon was some miles west of Gibeon the new moon could possibly appear to a spectator further north at Bethoron as lying low "in the valley of Ajalon," while the sun at the same moment was seen "in the midst of heaven" upon Gibeon. In fact the moon could not have been seen at all if the occurrence took place at the time of her conjunction with the sun. "Bathed in such a meridian sun-glare she would have been invisible even to the Lick telescope." The moon was probably in her last quarter, low, but visibly setting in the west. If not seen, then why is she mentioned? Speaking of the "Sun Dial" incident of Hezekiah's reign Mr. Totten says;

The moon though involved in this incident could not be mentioned because she was just short of her entrance into the 4th quarter, wherefore at that moment (i.e. absolutely), was below the *eastern* horizon" (!)

Now when the moon is in her last quarter she is *west* of the sun, and if not being seen prevented her being mentioned in one instance, the fact of her being mentioned in the other case shews she was visible. And if the moon was visible as well as the sun, at the time of Joshua's "Long Day," then the moon was not in "conjunction" with the sun at that time, and so the professor has given us the wrong date for the miracle. We do not question his figures proving that a conjunction took place on the day of the year named; but we do question the conclusion that this proves it to be the year of Joshua's "Long Day."

We remember once having to question Mr. Dimpleby respecting one of his dates in a similar manner, and a very important date too. One affecting the true A.D. Mr. D. assumes that the Crucifixion occurred on a Friday, what is popularly known as "Good Friday," at the winter solstice of the *Anno Mundi* 3996. He calculates, and doubtless rightly



calculates the year when the 14th of Nisan, the time of the Paschal offering, fell upon this Friday; but if the Messiah was not put to death on a Friday it follows of course, that this could not be the year of the crucifixion. That the Saviour was not crucified on a Friday is evident from Matt. 12:40; for no calculator, not even an astronomer, can make "three days AND three *nights*" from Friday afternoon, the sixth day of the week, to the "end of the Sabbath," or Saturday, which was the seventh day. See Matt. 28:1. Hence, to add on the age of the Messiah, when he was cut off, to the year when a "Good Friday" fell on the 14th of Nisan, would not give the true A.D. And if we have not the true A.D. would it be correct to say that "The autumnal Equinox of 1889 was the 5,888th since Creation"? We recommend the professor to read a pamphlet on the subject of the true day of the Crucifixion, entitled "*The Sign of the Messiah*," by the "Rev." W. M. Jones, D.D., London. Since reading this we have no doubt that the Saviour was crucified on a Wednesday, as this day would reconcile Matt. 12:40, with Matt. 28:1, and other passages. But we cannot enter further into this question here. We only refer to these possible sources of error in otherwise excellent chronological works, in order that our Biblical Chronologists may clear them up, and prove to all Zetetics that the Bible is as worthy of credence in its systematic Chronology as we are striving to shew it is in its wonderful and natural Cosmogony.

Now, Mr. Totten, speaking of himself, says;—

"The writer does not pretend to explain *how* the day was lengthened, but accepts it as a literal fact fully corroborated by history."

We will therefore inform this Bible student how it was done. "*The Sun stood still!*" and if Mr. T. does not believe this, he may as well give up his search for Joshua's "Long Day." The inspired account not only tells us that the day was lengthened, but it also informs us *how* the day was lengthened. Yet our perplexed philosopher says; "How it was accomplished, God only knows." He might as truly say God only knows whether there was ever such a "Long Day," for if the Bible is not clear on one point it is not clear on the other. But it is clear on both points. And if the Hebrew's Writings are not sufficient authority, then it is useless calling in the corroborative testimony of the Grecian Herdotus, the Egyptians, or the Chinese. Either the Bible account is reliable *in toto* or it is not. Mr. Totten is not at liberty to accept one part of the account and deny another. We believe it is all true; and it certainly has in its favour the fact which can be proved any day by common sense experiments and common observation, namely, that the solid earth has not the awful motions attributed to it, and that the sun does move daily around us. Why, we ask, why should we believe that the moon has proper motion and not believe the same of the sun? Both are seen to revolve around us from east to west; but the moon, being

lower and nearer the earth revolves more slowly. Thus she gets left behind daily some twelve degrees or more; and so loses one complete revolution in a *moonth* or month. On what authority, therefore, does Mr. Totten say, "The Earth's *own* rotation must be rigidly included in the calculation." Can he give us a single proof that the earth has any such rotation? Has he ever found himself wrong side up? Hanging head downwards? He may be upset by our asking such questions, and set them aside as "absurd"; but we ask them in all seriousness. If the questions are "absurd," what must the theory be which logically calls them forth? We will not here attempt to shew the utter and practical absurdity of the globular theory, as there is much in Mr. Totten's book and belief with which we are in perfect harmony. But we will remind him that the globular theory was no part of the belief of ancient Israel: and being based on unproven assumptions, and as contrary to Inspired Cosmogony as to Natural Science, it can only be viewed in the light of a serious blot on the modern belief of "Our Race." The globular theory is a part of the evolution hypothesis, and both are founded upon an infidel "science" falsely so-called; and both alike fostered by a school of criticism that is antagonistic to the faith and hope of Israel. As Mr. Totten nobly says, when thinking only of inspired Chronology, and which we, in conclusion, repeat thinking both of this Chronology and the Divinely revealed system of Cosmogony;—

"If, therefore, we are to resume our place among the noble army of those who have already testified for Jesus Christ with their lives and works, we must repudiate *in toto* this iniquitous school of criticism, and recapture somehow or other, the Ararat redoubt, replace the Long Day in our Scientific Chronology, believe Moses rather than the Moabite stone, and the Bible rather than a sun-burned brick dug up at Babylon."

Bravo, professor! Add one word more and then you will be consistent, and make a good Zetetic. Let us also believe the Creator rather than the creature in the descriptions He has given us of His own Creation; and these descriptions will be found to be all in harmony with the facts of Natural Astronomy.

With Israel's greatest Teacher we pointedly ask; "If ye believe not his (Moses') Writings, how shall ye believe My Words"?

## OUR EARTH MOTIONLESS.

DEFINITE CONCLUSIONS OF SCIENCE.

A popular lecture proving that our earth neither rotates upon its axis nor around the sun.—Delivered at BERLIN by DR. SHEPHER.

GENTLEMEN.—One should be endowed with unlimited courage to dare come out before a large audience with proofs of the erroneousness of a scientific formula which since our earliest youth we had been



taught to regard as the only correct and unerring theory. I am pretty certain that at this moment you have come to the same conclusion about me as, four month's ago, I would have entertained myself of any man who should have asserted that it is not the earth which revolves around the sun, but the sun which revolves around the earth. I would have considered such a man either an ignoramus or a lunatic; nevertheless, I now consider the immobility of the earth an incontrovertible fact, and even hope that my convictions will be shared by those who without prejudice will reflect upon that which I will now impart to them.

Some time ago we had the opportunity of witnessing the series of experiments with a pendulum which, according to the theory of the celebrated physicist Léon Foucault, furnish proof of the diurnal rotation of the earth around its axis. I had long neglected to acquaint myself with these experiments, although, while explaining to my pupils the motion of the earth around the sun, I had always found very extraordinary results—absurd, I ought to say—one circumstance pertaining to this motion with which you will acquaint yourselves in my present lecture. So firm was my conviction of the diurnal and annual revolutions of our globe (earth?) that I had accepted even Foucault's experiments with the pendulum as sufficiently demonstrative.

Meanwhile, I had been appointed to assist in the experiments, and, as they bear directly upon the subject in hand, I will briefly state in substance the results.

If, choosing any given point in space near our globe, we imagine a limitless series of circles, then, in consequence of their parallel position to the equator, we term such series of circles parallels.

From the exterior form of the earth we conclude that these circles go on diminishing as they near the poles. If we fancy two such circumterrestrial parallels as dividing this auditorium, then the northern parallel will be shorter than the southern. In the rotation of the earth around its axis in 24 hours both parallels will have to accomplish their rotation in the same space of time; and as they complete the circuit simultaneously, but the southern parallel is longer than the northern, then, consequently, every point of the southern parallel must move with greater velocity than the like points of the northern.

Let us now throw a glance on the apparatus called the pendulum, which is well-known to every one, but in the particular case in point a very equivocal authority. It is easy to demonstrate that the arc of the vibration of the pendulum does not depend upon the change (*Drehung*) of the point of suspension. This undisturbed regularity of the vibration of the pendulum has served M. Léon Foucault as a proof of the rotation of the earth around its axis. If we cause such a pendulum to vibrate across the parallels which we are imagining to pass through our audience,

then the arc of the vibration, as Foucault tells us will (not) change from the axial rotation of the emplacement, and will begin, in consequence of this, to gain in rapidity on the northern and less rapidly moving parallel, and will be out-stripped by the southern one, which moves quicker. In such a case, the arc of the pendulum will soon diverge from its direction from north to south, and its point turned to the north will near the east, and with the point turned south will begin more and more to near the west, till, finally, the pendulum will change its motion in the direction from east to west.

Now the reason for a deviation of the pendulum has ceased; it vibrates no more across two parallels, but only across one. The cause of its deviation from its first direction is removed; it would then seem that the deviation itself ought not to take place any longer, but nevertheless it still continues. The pendulum abandons the east and west direction to approach with its points the southeast and northwest until it reaches its starting point, at which it must again deviate according to Foucault's theory.

As the pendulum does not preserve the direction from east to west, but always gets farther and farther away, I conclude that the deviation of the pendulum is not caused by the axial motion of the earth, but is due to some other motion yet unknown.

By a series of careful experiments I have found that all pendulums are not liable to a deviation in the same degree; the heavier the ball, the more rapidly it will deviate. And as the rotation of the earth around its axis—if we admit its existence—ought to be manifested everywhere equally, then its deviation also, for every kind of pendulum, must be equal in time; but this in reality is just what is not the case.

The conviction that Foucault's arguments were erroneous forced me to verify at the same time all other proofs which have hitherto been regarded as demonstrating the rotation of the earth around its axis, and it was then I found that we had no evidence for such a theory.

Already in antiquity Aristarchus of Samos and other philosophers several centuries before Christ affirmed that the stellar sphere is motionless and that the daily rising and setting of the stars can only be accounted for on the theory of the earth's rotation around its axis. But all these men, profound thinkers, had come to the above conclusion only from the fact that otherwise such an incredible rapidity of the celestial bodies as would enable them to accomplish a diurnal circuit around the earth could never be accounted for. Of course every one must agree with me that at the present moment such an argument would be regarded as very small proof. Indeed, if we were able to take a little peasant boy from a country in which railroads were unknown, and tell him of the existence of carriages which are able to make a mile in five

minutes, of course he could never believe us ; such rapidity would seem incredible to him. He is ignorant that light travels with a velocity of 40,000 miles a second, and that the rapidity of electricity is still more considerable ! Thus, this argument with respect to the celestial bodies whose nature in as yet so little understood, and the path of whose motion is a vacuum or in a space filled with attenuated matter is only assumed or guessed at upon the strength of an hypothesis—that these bodies cannot have such a velocity of motion as to be able in twenty-four hours to circumscribe the earth—such an argument, to make us reject the possibility of the rotation of the celestial sphere, is certainly weak and futile.

But the contrary position, the one commonly accepted, also proves untenable when we look into it carefully.

It was found in the measurement of the earthy meridians that the globe is flattened towards the poles, and that in consequence of this, the equatorial diameter is greater than the line which passes through the axis of the earth from one pole to the other. Man, who endeavours to penetrate into all the mysteries of nature, tried to find the reason for such a flatness, and then comes Newton and explains it by the rotatory motion of the globe. In consequence of such a rotation all the component parts of the earth, and especially the bodies to be found upon its surface, receive an impulse to abandon the earth. Such an impulse is then named the centrifugal force.

At the poles, where the rapidity of motion is equal to 0, that force is also equal to 0 ; further from the poles to the equator that force increases in ratio with the increase of the parallels, so that the greater the parallel is, the more rapidly, as I have already said, must move each of its points. In consequence of this, they say, the greater part of the earth's mass is gravitating toward the equator ; and for the same reason, the centripetal force, acting on the equator with greater intensity, compels the concentration there of the greater portion of the mass. Hence it is finally concluded that the earth must forcibly rotate around its axis, because were there no such rotation there would be no centrifugal force, and without such a force there would exist no gravitation toward the equatorial diameter or zone.

We have laid before you now one of the existing evidences of the rotation of the earth. I do not accept such an argument, but reject it with many other scientists who have discarded it before myself. . . .

Therefore, gentlemen, until we have more weighty argument to explain satisfactorily the accumulation of the mass of the earthy matter on the warmer zones, I cannot undertake to accept as a reason for it a certain centrifugal force, appearing as a consequence of the motion of the earth around its axis, and I will not allow the hypothesis, were it

but because I know beforehand to what inexplicable contradictions this centrifugal force would bring us. Some of these I will point out presently.

We must now consider the fourth and last evidence of the rotatory movement of the terrestrial globe.

In 1867 M. Richer remarked that a clock of his, which kept good time in Paris, having been transferred to Cayenne, *i.e.* five degrees north of the equator, began to lose two and a half minutes daily. Richer had to shorten the rod of the pendulum one and a quarter lines to make the clock go right. It is well-known that the time of the vibration or rapidity of a pendulum increases with the diminution of its length, and is arrested proportionately with the elongation of the rod. Later it was ascertained that such a retardation happens also when the clock is carried on a high mountain. As the vibration of the pendulum is based on the laws of falling bodies, and the fall of the bodies itself depends on their weight, or otherwise, on the attraction of the earth (?) it was but natural to conclude that if the vibration of the pendulum is not the same everywhere, and the attraction of the earth varies, then this affords us conclusive evidence that the cause of the retardation of the vibrations of the pendulum is a certain centrifugal force, which develops with the motion of the earth around its axis, and that it is this force which arrests the swing of the pendulum by decreasing its weight. But such a conclusion is erroneous ; and we could far better admit the following conclusion, at which many of our physicists now have arrived—the attraction of the earth diminishes with the recession of the body from its centre, which serves at the same time as the centre for all the attractive force of the globe. (That is if it were a globe !—ED.)

And what if the cause of the retardation of the vibrations of the pendulum at the equator and on high mountains should prove quite different from what is now generally supposed ? What if the cause is not at all the decrease of the force of attraction (whether from the recession of the object from the centre of the earth or centrifugal force), but on the contrary, its increase, proceeding from the accumulation of bulk at the equator, in which case the force of attraction increasing, increases at the same time the weight of the body, and in the pendulum the weight of the ball ? There is one fact not known to all physicists, I believe, namely, that the rapidity of the vibrations of a pendulum depends not only on the length of its rod, but also on the weight of the ball itself. It might be even more correct to express it thus ; the velocity of the motion of the pendulum depends chiefly on the weight of its ball. When I elongate the rod of the pendulum I force the ball to move on a longer level, and increase thereby its own weight ; I can also, without elongating the rod, increase its weight by other means ; the result will be the same. Thus, for instance, every one is aware that

even people unacquainted with science, when their clocks are running too fast, and they wish to make the pendulum vibrate slower, attach to the ball either a stone or a small bit of iron, and thus attain their object. The physicists have made very exact experiments in this direction. They found that a pendulum having an uniform length of rod makes 20,000 vibrations—

With a ball attached to it weighing 2 k.g. in	1,977 seconds.
"          "          "          4 " "	2,010·55 "
"          "          "          6 " "	2,021·31 "
"          "          "          8 " "	2,027·04 "

Therefore the greater weight of the ball the slower the vibration of the pendulum. From these experiments, conducted with the greatest precautions and published in the "*Comptes Rendus de l'Académie Française*," tome xxi., p.p. 117-134, it appears: 1, That the laws of Galileo are not quite exact as to the vibrations of the pendulum; 2, That the explanation of the retardation of the pendulum on the equator by the decrease of the force of attraction of the earth is evidently false; 3, That even the universally accepted laws of the gravitation of bodies are not sufficiently exact; and 4, That, in general, the means employed toward discovering the laws of nature with the help of calculations is not only being proved unreliable, but it serves but the more to darken the truth.

You will have seen from the last two arguments, which have hitherto served as evidence of the rotation of the earth, that as the result of such a rotation was assumed a centrifugal force. Its presence was vainly sought for in the currents of the ocean, as well as in those of the air.

And, indeed, it is not easy to explain how or on what principle the air—this soft, yielding, incompressible body, agitated by various currents—could have remained unaffected by the rotation of the terrestrial globe. If the greatest physicists admit that hard bodies are influenced by such a rotation, then it appears, it will not be too bold on my part to maintain that the rotation of the earth around its axis should inevitably exert an influence on the air. This influence should be shown first of all in that, during the rotation of the earth from west to east, there would appear immediately an atmospheric current from east to west.

Indeed, if the earth, together with its atmosphere, rotates in a completely empty space, then in every case it might be possible to admit that the earth rotates without producing any influence on the atmospheric ocean. But against the theory of such a vacuum we have the very quality of the air.

The air, as much as we know of it, has such a great tendency toward expansion that all the hitherto worked out laws of gravitation have remained foreign to it. Were the most exterior, the most rarefied layer of air not to encounter on its way any obstacle toward its expansion in

the shape of a new planet, it would scatter itself throughout the whole universe, moving farther and farther into the infinite space; the particles of the air nearer to this layer would follow its example, and, finally, the seas and rivers of the terrestrial globe, all the water would take part in such a process of expansion, to disappear at last from the face of the earth. (We produce first just such a phenomenon with the help of an air pump). On the ground that such a thing does not exist in fact, we must suppose that there is some retaining cause, which according to custom, we will term Ether. Counteraction to the evaporation of the air consists in this, that it forces every upper layer to press upon the next lower, causing by such a progressive pressure the condensation of that layer of the atmospheric air which is next to us.

If such an ether exists in reality, then there must occur in the atmosphere those phenomena so familiar to us, which always take place in cases when the air encounters obstacles to its free motion. Let the earth rotate, then all the atmospheric space, on the ground of the attraction of the earth, will be compelled to participate in the movement, and the consequence will be that the upper layers of the air, finding a resistance in the ether, will either be retarded, or—which would be the same—assume a seeming current in a direction opposite to that of the earth's motion. Such a current of the upper stratum of the air would provoke a resistance in the next lower one, and this one, in its turn, receiving the impulse communicated to it by the upper one, would offer a resistance to its next lower neighbour, etc. Finally these two opposite currents, intermingling in their onward impulse, would form two streams—one from east to west, in which would participate, first, the whole atmospheric ocean world, and then the contents of all the watery basins; the other from west to east, into which would be drawn the very core of the terrestrial globe.

But let us make another supposition, and notwithstanding the impossibility, let us admit that there is *no* ether; that ether is no more nor less than the product of those endless hypotheses in which man has entangled himself from the first in his efforts to investigate nature; even in the latter case it will not be a difficult task to prove that the rotation of the earth must cause the current of the atmosphere to take an opposite direction. On what ground did our physicists base their suppositions when telling us that we don't feel the rotation of the earth? How do they explain the circumstance that objects on its surface are neither upset nor fall? They point to the laws of inertia. Very well! I agree with them! I agree only the better to vanquish my adversaries with their own weapons, as I have hitherto always done. You are probably aware that motion can be imparted to any substance, but that a fluid or gaseous body can be made to move only when it is imprisoned in a hard one. Air is a body which is more than any other disassociated as

to its component parts. Let us suppose that the earth has communicated its movement to the layer of air next to the surface, and thus dragged it after her. This layer, perfectly separate and distinct from the next upper one unattached to it, is unable to communicate its motion to the other and upper layers. Hence these upper layers remain unaffected by the motion of the lower one, or what comes to the same, begin to assume a *seeming* rush (or current) from east to west, with a rapidity equal to the earth's rotation. Every point of the equator during the diurnal rotation of the earth crosses in the same lapse of time 1,250 feet, but in the direction opposite to that of the earth's rotation. But such a rapidity of the atmospheric currents is nowhere to be seen, and it exceeds ten times the speed of the most terrible hurricanes.

I do not belong to those who accept their own conviction of an east and west atmospheric current for a real and already demonstrated fact. And yet all the modern physicists, scientifically convinced of the absolute necessity for the existence of such a current, have accepted it as a fact, resulting from the earth's rotation around its axis, although all their efforts to find it anywhere in nature have been in vain. Even the *passates*, explained for a certain time by the same rotatory motion of our globe, deprived at the present moment of their once famous periodicity, are now being accounted for a great deal more simply, to wit, by the different degree of heat in the upper envelope of the terrestrial globe.

We have but to represent to ourselves, in thought, all the various atmospheric currents, at one time weakening, at another increasing, and moving in every imaginable direction, called by us sometimes winds, sometimes tempests; we must imagine these winds running very often in direct opposition to each other's course, and then ask ourselves the question: Is there any possibility that such currents could exist when the air is at the same time forced to passively follow the simultaneous rotation of the earth around the sun and its own axis? Is it possible to admit that in case such currents existed in nature, our atmosphere would at the same time continue the constant and faithful satellite of our earth?

Therefore the circumstance that the rotation of the earth around its axis is not at all felt by us; that other circumstance, that this rotation has never been in any form or manner satisfactorily proved, and *cannot* be proved; the absence, finally, in nature, of those atmospheric currents which in all justice ought to be found as a consequence of the rotation—all this serves us as a refutation of the theory of the rotation of the earth around its axis, perfectly convincing, if it were only because we do not possess a single evident proof in favour of the rotation.

Is it not a cause of wonder that the *savants* of the whole civilized world, beginning with Copernicus and ending with Kepler, first of all

accept such a rotation of our planet, and then for three centuries and a half after that seek for it some proof? But, alas! they seek, and as was to be expected, find it not. All in vain; all unsuccessful! *From The Scientific American.*

(To be Continued).

[This very suggestive lecture proves unmistakably that the earth has none of the terrible motions attributed to it by the Astronomers. We should be surprised if Dr. Schœpfer did not afterwards find out that the earth could not possibly be a "globe" if it has none of the motions necessary to the globular theory. Ed. E.R.]

## THE NEBULAR HYPOTHESIS.

BY LADY BLOUNT.

Hypothesis quoted,  
 "All matter once floated  
 In atoms wide roaming through space";  
 When a power, perhaps "Nether,"?  
 Pulled all down together,  
 How it happened no mortal can trace!  
 But, dear me! however  
 Could there then be a "Nether" ?  
 Or an upward or downward at all?  
 With "atoms" dis-severed,  
 Now gravity-tethered,  
 And shooting through space like a ball.  
 This power of such fame,  
 "Gravitation" by name,  
 Pounced down on the atoms while strewing;  
 But further back gaze,  
 O'er eternity's maze,  
 What *before* was good gravity doing?  
 The gravity theory,  
 When started was clearly,  
 A fancy which Newton had "run";  
 Imagine the motion,  
 This world, mostly ocean,  
 Once a cinder shot out from the sun!  
 Like Solar relation,  
 Inherent rotation,  
 Sent the "globe" whirling round, till full soon—  
 Just picture the view—  
 The sparks, how they flew!  
 And a beauty so bright made the Moon!  
 The Sun, the great "Master,"  
 Sure ought to go faster,  
 Than the sparks it sent backwards reviewing;  
 Yet globe and Moon too,  
 Keep old Sol well in view,  
 And play all around while pursuing!  
 The Globite avers,  
 It took *Millions of Years*,  
 For the earth to develop and cool, Sir,  
 But he who will try  
 To give God the lie,  
 Shall yet prove himself but a "fool," Sir.

## CORRESPONDENCE.

All Letters sent to the Editor should be legibly written on one side only of the paper, and should have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. Stamped addressed envelopes ought to be enclosed for replies. Short pointed letters or articles preferred.

The Editor cannot, of course, be held responsible for the various opinions of his correspondents; nor can he enter into correspondence respecting articles, &c, held over or declined. Letters must be prepaid, and addressed to

"ZETETES,"

Editor of THE EARTH (not-a-Globe) REVIEW,  
Plutus House, St. Saviour's Road,  
Leicester, England.

## NOTES.

**E. H. Seedley.**—Thanks for *Millennial Dawn*, and other papers received. Do what you can to spread true views of Creation Truth, for if Bible Cosmogony is not believed to be true the Scriptural Hope of Eternal Life cannot logically or long survive.

**H.H.S., Bayswater.**—*Science Siftings* to hand. Too crowded to quote in this issue. As you say in marginal notes, some of its "Science" is "bosh." It appears that even the "Siftings" of "Science" need further sifting. Thanks for your encouraging words *re* No. 6. *Earth Review*. We try to make each number "22 Carat."

**H.V., Santa Cruz.**—(1). Thanks for *Scientific American*, and other literature duly received. You will see that we are making good use of the former. (2). No! The Christmas No. of *The Muses* did not "contain anything of importance *re* the Plane Earth." But we will, if possible, print the Editor's letter promising it would, so that our readers may see we were justified in expecting something. (3). Yes. We have asked our friends in southern latitudes to collect facts for the *E.R.* respecting the sun and stars.

**C.H., London.**—Cutting to hand from the *Pall Mall Gazette*. But it misrepresents *Zeteticism*. We have already shewn that "the apparent rotation (revolution?) of the stars round a south pole" (magnetic star centre?) is no proof of the shape of the earth. And we are prepared to shew the same even if you could prove that the sun, in our winter, "appeared" to revolve around a southern celestial "pole" or star centre. You must come down and study the *Earth* itself if you wish to find out its shape.

**J.A., Belfast.**—Thanks for various cuttings, as also for 2/6 for "free literature" to be sent to our earnest missionary friend in Ceylon. We have sent various parcels of papers and pamphlets from time to time, but we sent him a special parcel out on receipt of the above.

**F.W.J., Ceylon.**—Kindly distribute literature sent as above where you think it will produce good fruit. Have had no spare "space" yet to print the long correspondence with Mr. T. C. Hillard. The work accumulates, but our strength does not. We fear we shall ere long have to devote what is left more exclusively to meeting the increasing responsibilities of a large family. But if so, the *E.R.* will still go on.

**G. Revell, N.Z.**—What you kindly sent has been forwarded to the Secretary of the U.Z.S. Thanks for "the balance." You are one of the few (very

few) who remember that an editor cannot live entirely on air while giving his time, energy, and skill to the truth, however much he may love that truth.

**J.S., Bootle.**—The letter and poem of Mr. Brown is a bombastic piece of self-sufficiency. He seems to be a pantheistic globularist. You should ask him the ancient question, "Canst thou by searching find out God?"

**G. T. Bolt, Portsmouth.**—Poem approved, but must stand over for the present.

**A. E. Skellam, Wandsworth.**—Thanks for useful Extracts from Glaiser. Shall be used as opportunity occurs.

**H.C., Belfast.**—Mr. Gillispie's book, notwithstanding all his boasting, has one serious defect. It *assumes* the earth is a "globe"; and he neither attempts to prove this assumption nor to deal with the fact that the surface of standing water is absolutely level.

**J. Smith, Halifax.**—Let us know how the Challenge progresses. Be very careful how its terms are drawn up. But even if the opposite party fails to proceed, cannot *Zetetics* themselves get up some special experiments, and then publish results?

**W.B., Toronto.**—Paper *re* Joshua's Sun received. Cannot print at present.

**T. Whittle, Croyden.**—Letter and diagram received. Thanks. We have given a report of the Portsmouth Lecture as several besides yourself have expressed a wish for it.

## Letters to the Editor.

## ADULTERATED GEOGRAPHY.

Sir,—Some years ago it was reported that "Dr. Livingstone refused to entrust his dispatches to the Royal Geographers because they were in the habit of altering them to suit their own views." It appears evident from the following extract that "the habit" is kept up now, and by consequence the people do not know what the actual result obtained from any observation is. Truly we live in an age of adulteration, fraud and shams.

"Sir Benjamin Stone excused himself from giving further details of the eclipse, on the ground that the official report had not been published."

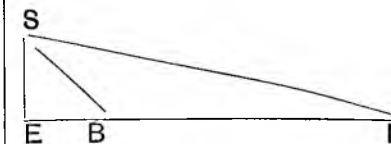
Could you kindly inform me if the "official report" will be published on the first day of April or on the fifth of November? BALAAM'S ASS.

## A MATHEMATICAL COBWEB FOR SILLY FLIES.

Dear Sir,—A Newtonian (with the initials C.H.) has just added another to the many mathematical frauds found in books on popular Astronomy. Airy has "proved" that a degree of latitude or longitude consists of 69 miles so that the circumference of his pagan globe may be 24,840 miles, but

Herschel makes the degree 70 miles, so that the entire circumference may be 25,200. Landner by mathematics finds the sun's distance to be 100 million miles. Herschel 95 millions; Airy 92½ millions, &c., all by Mathematics! Again, Brewster and Herschel differ in their calculations of the nearest fixed star's distance by such a trifle as eight hundred thousand million miles! Despite their "infallible mathematics," the difficulty is in finding out one point about which these Astronomers agree.

The globularist, C. Harpur, in a leaflet gives the following figure, calling S the sun, E the equator, N the north pole, and B Bordeaux.



At the very outset he craftily begs the whole question by assuming without proof a north-pole and an equator so essential to the sea-earth globe. He next adds another supposition that at noon on March 20th, the sun as seen from the north pole is just on the hori-

zon, whilst at Bordeaux its altitude is  $45^\circ$ . But since, with the altitude of  $0^\circ$ , he could not form his triangle S E N, he supposes himself about a mile south of the imaginary pole so that he may suppose the sun with the altitude of one minute, the altitude at Bordeaux still being  $45^\circ$ , whilst the sun is perpendicular at the equator. Having thus arranged, he informs us that an angle of one minute such as at N must have "the line subtending it 3,450 times its own length off," so that EN is 3,450 times E S. But the angle E B S being  $45^\circ$  and the angle E  $90^\circ$  the angle E S B is  $45^\circ$ ; therefore the line S E equals E B, and EN is 3,450 times E B, that is, Bordeaux ought to be only 2 miles or so from the equator. Now, if we grant C.H.'s suppositions as to altitude and that this is a mere question of plane triangles something like the result he mentions must follow. But Zetetics reject mere supposition, and demand facts established by actual observation of altitude at the places named, with the exclusion of all mathematical jugglery. Then since the sun's altitude is reckoned on the vault of heaven, independently of terrestrial globularity, and since Bordeaux is  $45^\circ$  north of the "equator," with an assumed altitude of  $45^\circ$ , the whole distance between the equator and north-pole being  $90^\circ$ , Bordeaux ought rather to be precisely midway between these two points so as to brush away C.H.'S cobweb. Moreover, the established facts that the surface of water is level and that there is no terrestrial curvature, railways and canals being cut without any allowance for convexity, the line EN in the figure must be straight, and granting this to be a question only of plane triangles, E B being equal to E S, the height of the sun ought accordingly to equal the distance between Bordeaux and the equator. . . . The crafty Newtonians would have us for the nonce forget their assumptions of immense distances and sizes, and in measuring altitudes of sun and stars they virtually reject their atheistic supposition of infinite space and confess the fact of an arched or vaulted blue sky overhead, which is as manifest to our eyesight as the ceiling of a bedroom. However, they cunningly call it a "celestial globe," making it a kind of envelope for the "terrestrial" one. . . . Further, it is rather remarkable that Snowball in his "Trigonometry (p. 65)

gives the very same figure as C.H., but with a semi-circle described on E.N., as the author considers this a question not of plane but spherical triangulation. . . . As regards C.H.'s second figure, it is a fraud similar to the first, and his remarks on Refraction are not worth answering.

A. McINNES,  
25th. Feb., 204, Dumbarton-road,  
1894. Glasgow.

Dear "Zetetes,"—Having formed one of the enthusiastic audience at your late lecture, while on a visit to Portsmouth, must be my excuse for taking the liberty of addressing you. I have reached over half the years allotted to man, firmly believing the Earth to be a Globe rotating on its axis, and revolving through space, and I never heard this to be other than an acknowledged fact until you raised the question.

Although you handled the subject from your point of view in a masterly manner, striking at the root of the Globular theory, and have somewhat weakened my belief in it, still I must beg you to bear with me as one not yet fully persuaded. Although I have some scholarly claims (having letters to my name) I own I cannot myself give you what you asked for, namely, an absolute proof that the earth is a whirling globe. At the same time I must own, Sir, that I cannot yet prove it is not. I confess that there was a striking contrast evinced at the lecture between your cool and telling replies and your atheistical opponents blustering oration, which self-possession excited admiration in the breasts of the appreciative and candid, and something like awe in the agitators of the popular theory.

The lecture on the whole was impressive and at times thrillingly interesting. But if you will offer no objection I will look up my Astronomy and ask you to answer a few questions as to those matters which I think require settling. I enclose what I confess is a beggarly report from the *Evening News*; also one from the *Evening Mail* which latter, I suppose, is as good as you can expect under the circumstances.

Yours respectfully,  
R. I. P.

Tuakau, Auckland, N.Z.

Dear Sir,—I received your parcel of *Reviews* all right for January, 1894,

Birmingham.

Sir,—I remember some years ago when "Parallax" was lecturing in this district that one or two questions were asked by him on my account after some of his lectures to which no reply was attempted. Perhaps some of your opponents can answer them, and so help to settle the merits of the "plane" or "globular" question.

1.—*Axiom.* Parallel lines never meet. Yet, take the parallel lines of a railway which in many instances run for a considerable distance in quite straight lines. Look at them from a given standpoint. They will appear to approach closer and closer to each other till they meet apparently. Look till a locomotive appears at the end of your view. What part of the locomotive do see first? Not the wheels. It is the same, applied similarly to a ship at sea. Is it so or no?

I have stood on Dover Cliffs and seen the White Cliffs of France over 20 miles distant. How could I, if the earth was globular? Will any opponent answer this, and give the correct allowance for the continuous dip of the curve in over 20 miles?

I quote a slip from "The Sheffield Weekly Telegraph" which says—

"The bottom of the Pacific between Hawaii and California is said to be so level that a railroad could be laid for 100 miles without altering the grade anywhere. This fact was discovered by the United States surveying vessel engaged in making soundings with a view of laying a cable."

Will anyone explain to us, whether, on the globular hypothesis, the bottom of the sea is also globular? and if so, how the Pacific can be so level that it runs for 100 miles without altering the grade? Does grading make any allowance for curvature? These queries are for enlightenment.

To finish: I knew "Parallax," and have heard him put to shame many shrewd and clever men.

I am yours, obediently,  
H. BRITTAIN.

Belfast, 7 p.m.

Saturday, 24th March, 1894.

Dear Friend,—The sun rose this morning at 5.55 a little to the South of East and set at 6.18 a little North of

also a biggish parcel of some literature from Mr. Squire by same mail, which I have distributed right and left. I think it is a capital number, and augurs well for the coming year. My letter seems to have caused a little commotion. The facts I mentioned are patent to anyone who watches the sky in N.Z. and cannot be contradicted. When the Southern Cross is at its lowest altitude it is of course reversed in position, the foot star of the Cross being uppermost. It also appears half as large again, as when at its highest altitude. It takes twelve months to reach the same position in the sky that it occupied on a certain night and hour twelve months previous. I only wish I had the means and opportunities to test sheets of water here, as I feel positive they would prove the same result as the Bedford Canal gave.

A friend of mine has a brother here who graduated in the N.Z. University with distinction, and a B.A., and he confessed to my friend that there is really *no absolute proof* of the globular shape of the Earth. In reading your Correspondence Notes I was glad to see you acknowledge receipt of two pamphlets on the Higher Criticism.

You see that our Churches out here are honey-combed with doubt and unbelief. The Presbyterians are busy just now with a so-called "Heresy Hunt" against one of their ministers near Auckland, for giving the right hand of fellowship to the Theosophist Society formed here, and committing himself to some of their tenets. I have got you one subscriber to the E.R. for 1894.

Your article on Star Motions I think strikes at the root of the matter. I am told that Navigators in S. Latitudes rely entirely on the Sun for their position in making land, and not by the distance run at all; and that the log and chronometer never agree. I am pleased to see the little E.R. published every two months, contending so earnestly for the faith of the Holy Scriptures which is assailed now from many sides, and even by professed christians as well. It behoves us to be constantly on our guard against all forms of unbelief and error. I wish you and your co-workers much success, and pray that your hands may be strengthened, and the financial part prove prosperous. Yours faithfully,  
Feb. 22, 1894. GEO. REVELL.



West, Belfast time, which is 23 minutes and 40 seconds behind Greenwich.

Lat. 54° 36' North.

Long. 5° 56' West.

In haste, yours,  
J. ATKINSON.

Dear Sir,—Would not a circular chart of the world be the most accurate in principle, the lines of latitude, parallel circles proportionately related, 60 miles to a degree at the equator, and gradually lessening toward the north-centre, so that at 45 S. the distance of a degree would be 30 miles; and increasing toward the antarctic regions so that at 45 S, the distance of a degree would be three times as great, viz., 90 miles, and still increasingly proportionately southward.

The meridian lines of longitude, straight, diverging from the north-centre, 24 in number to represent the 24 hours of the day and night; 15 degrees of the circle to an hour.

Now on a school globe it is known

that every direction of latitude and longitude is a *curved* line, while on a chart of the world according to that designed by Mercator, which is still used, *all* the lines of latitude and longitude are *straight*, the degrees of longitude are the same length (all the lines are drawn at right angles) at the different degrees of latitude both northward and southward of the equator.

The map of the world designed by Mr. J. Steer Christopher, of Morden College, Blackheath, near Greenwich, seems to me scientifically correct, and well worthy to be studied by Navigators, Captains, and others.

One of the last letters written by the late Lady Brassey, was from on board the "Sunbeam," in which she expressed her thanks for the copy she had received, and her belief that the study of Geography would be much simplified by its general adoption.

Yours, &c.

Croyden.

THOMAS WHITTLE

## THE PORTSMOUTH LECTURE.

On Monday evening March 19th, the editor gave a Lecture at Portsmouth entitled, "Is the Earth a Whirling Globe?" Large handbills and larger posters had well advertised the lecture all over the town, and the hall which is reckoned to hold six hundred people, was nearly full. Great interest was manifested in the lecture by high and low; and on the part of some of the lower orders great excitement and a spirit of opposition. This, to some extent, was said to be due to previous lectures given in the town by a zealous but not over prudent advocate of the Plane truth; but nothing could justify the boorish behaviour of a few in the cheap seats who had come, as one confessed, for "amusement" and not for instruction. The lecture was listened to with marked attention, but when the questions began, had it not been for a restraining Power, general respect for the Chairman, the firmness and self-possession of the Lecturer, and the presence of the officers of the law, the boorish element present would have got the upper hand, as on a former occasion. But as the bears could not bite, they wanted to growl all the more; and, at the close of the meeting, they doubtless went back to their dens somewhat disappointed. They were the only ones who were so disappointed; the friends of truth and fair play were delighted with the lecture. Several who would not yet avow themselves as Zetetics came up to the platform afterwards to thank the lecturer, and to express their regret at the unfairness of the Globularists.

As discussion had been publicly invited, the following rules of debate were read out by the Chairman before the lecture began.

### RULES OF DEBATE.

After the address an opportunity will be given to anyone either to ask relevant questions, or to debate the subject with the lecturer, if any gentleman come forward for this purpose. If more than one offer to debate, the meeting shall decide which one.

The Subject to be, "*Is the Earth a Whirling Globe?*"

The opponent affirming, and the lecturer denying. Each speaker to occupy not more than ten minutes, and then to be subject to five minutes questioning by the opposite side. Short and categorical answers to be given; and the questions to be confined to the subject and syllabus of the lecture.

The ruling of the chairman as to time or relevancy to be decisive. The discussion to close at ten o'clock.

These rules, if followed, were calculated to give each side a fair chance, and to bring out what could be said on both sides for or against the globular theory. But at the close of the address, which lasted nearly an hour, on the question being put by the chairman whether the meeting would have Questions, or Debate? the globites vociferously demanded, "Both." As no one then offered himself for debate, a great many questions were asked, and answered; some of the questions being relevant and courteous, and others utterly irrelevant and purposely discourteous.

After about forty minutes questioning, a well-known local gentleman was prevailed upon to come on the platform to "debate" the question. The lecturer shook hands with him as he came up and gave him an encouraging welcome. This champion of the globular theory spoke for about ten minutes in a loud, excited and desultory manner, avowing his belief in the nebular hypothesis as accounting for the origin of the "globe," and in the evolutionary theories of Darwin as applied to the origin of man and species. This proves our contention that "Scientific" Infidelity is ranged on one side of this question, and Zeteticism and Bible Christianity on the other. Only let these forces grapple under fair and orderly conditions, and Truth must prevail. The lecturer replied in a quiet and confident manner that no one in the audience was any better able to prove the earth a globe after the excited speech just listened to than he was before it. That no proof had been given of globularity, or whirling motion; and in fact, *none attempted*, unless mere assertion were proof. We had been assured, on the authority of our evolutionary friend, that the earth *did* move; that it carried the atmosphere round with it, and so prevented anyone either feeling or seeing the motion (then how are they to know of it?); that the moon "pulled" the ocean away from the earth and so caused one tide, while it "pulled" the earth away from the water and so caused the opposite



tide (yet we got no nearer the moon !); that the sun rotated upon its axis, and that *therefore* the earth rotates upon *its* axis ("Imaginary" of course !); that as Mars was "cooling down" so also "our planet" had cooled down (although some of the people on it were still quite in a great heat !); and that the Manchester ship canal had a hill of water on it, in the middle, "owing to the convexity of the globe," although proof had been given that the Engineer had made no allowance for curvature, and was practically forbidden to do so by the Standing Orders of the House of Commons, which were read. The lecturer having occupied ten minutes in analysing the previous speech, our Darwinian friend was again invited to speak, although it was past the time for concluding; but he had had enough of it; and he descended from the platform in a much quieter manner than he had ascended it. In fact, like Mars, he had "cooled down" considerably in the meantime. Let us hope therefore that he was a wiser man for his temerity. But if globularism cannot be supported by more courteous methods and better "arguments" than those adopted at Portsmouth, then wise and reflecting people will draw their own conclusions. Even the reporters have shewn on this as on former occasions a lack of candour and impartiality, and they seemed more inclined to pander to the lower tastes and prejudices of their readers, than to try to educate and elevate them. We should have thought that the press had a higher and a nobler mission than this. However we give two extracts below from the reports sent us. As the cuttings were neither dated nor named, we cannot give the titles of the papers. Our friends should always label and date their cuttings with pen and ink in the margin or on the back, so that extracts may be verified.

#### ANOTHER ATTEMPT AT EARTH FLATTENING.

Yet another person—from Leicester on this occasion—has come amongst us to advocate and advance the flat earth theory. Portsmouth produced a zealous exponent of this theory in the person of Mr. Ebenezer Breach, but since the evening when he beat a precipitate retreat from the platform of the Albert Hall, notwithstanding a promise to speak again, he has remained *perdu*. Whether this is owing to Mr. Breach failing to bring his courage to the sticking point, or that a lengthened period was necessary to renovate his models, we are not aware. His mantle was donned last night by Mr. Albert Smith, of Leicester, an advocate of what is termed the modern Zetetic School of Philosophy, who addressed a large audience at the Speedwell Hall on "Is the earth a whirling globe." The chair was again taken by Mr. G. J. Merritt, T.C.—Mr. Smith maintained it was not. The globular theory was a popular one, and a man was looked upon as somewhat deficient in his mental powers if he had the temerity to question it. The belief that the earth was a whirling globe was an assumption, an hypothesis, a conjecture. The evidence of the senses was opposed to it. Its globularity was not seen or its motion felt. If it were a globe its curvature would be seen, and its fearful velocity would give them some tremendous sensation of its motion. Let them fancy a mass like the earth attached to spokes 25,000

miles high going round at the rate of 1,000 miles per minute. Would they not be susceptible to such a fearful motion?—A voice: "No."—The Chairman (Mr. Merritt), addressing the person who interrupted, "You annoyed us last time."—Mr. Smith: I shall throw myself on the good sense of the audience. We have offered fair conditions; if they are complied with I proceed, but I shall not without order. (Applause.) I did not come here to shout any man down (interruption), and I shall not allow any man to shout me down. (Cries of "Go on," and uproar.) Continuing, Mr. Smith remarked that nature did not play its students false, and the testimony of nature was that the earth was not a globe; in fact aeronauts had asserted that no dipping curvature was noticed at any altitude, but that the earth looked like one vast plain. With regard to the theory of gravitation, he contended that it was invented to support the other theory that the earth was a globe. If the universe was a sphere moving in space, there was something wanting to keep it in position, and the theory of gravitation was invented to support the previous hypothesis. The fact that bodies returned to the earth was no proof of gravitation. What was the connecting link between the sun and the moon? What was the kind of matter they conjured with called "gravitation?"

From another paper;—

#### IS THE EARTH A GLOBE?

At the Speedwell Hall, on Monday evening, there was a numerous company to hear a lecture by Mr. Albert Smith (Zetetes), of Leicester, in support of the theory that the earth is flat. The exact title of the address was: "Is the Earth a Whirling Globe?" and the significant title "Truth *versus* Fiction" headed the bill announcing the lecture. It was under the patronage of Lady Blount, Count Antonie Amerina, Mr. T. Shaw Phillips, J.P., and Mrs. Phillips, and Colonel St. Vincent. The Chairman was Mr. Councillor G. J. Merritt. Mr. Smith traversed the beaten track followed by the believers in the plane theory, and dealt with the arguments advanced in favour of the world being a globe. He examined the "proofs" of those opposed to him, touched on the disappearance from sight of ships at sea; gave an illustration of perspective as opposed to the globularists; alluded to the altitude of the fixed stars; and discussed the "supposed" terrific motion of the globe, the law of gravitation, water level, &c. The lecture was illustrated by means of diagrams; and at the conclusion questions were invited. On the whole the Lecturer had a very fair hearing, though many of his remarks were received with ridicule and irony; and the majority of the audience were not in sympathy with his views. Several questions were asked. One was how it was that a vessel sailing due west would come round again to the same place?—The Lecturer replied that many people believed that due east or west were straight lines; but these were impossible on a globe. The mariner's compass always pointed to the north; and he maintained that with a vessel moving round a plane, the instrument would still point in the same direction (and lie horizontal). . . . After further questions, Mr. Sweeney mounted the platform to debate with the Lecturer; and in a 10 minutes' speech of great volubility, he asked, if the earth were not a globe, would the Lecturer explain on what this mass of matter rested? Everything (he urged) was in favour of the globe being a body rotating on its own axis. Mars was a body that had cooled as the earth had cooled; and it had been proved to demonstration

that it was a rotating body. Universal gravitation was accepted by all scientists. . . . The Lecturer said the globe theory was connected with the nebular theory. He asked what was gravitation doing (originally) to let these atoms be flying about in the manner as accepted? Astronomers built assumption on assumption, and could prove but little. It was affirmed that the earth whirling along carried the atmosphere with it; but this theory had not been proved. He pointed out that a balloon filled with hydrogen could ascend, and all the atoms (in the "globe") could not pull it down. ("No, no.")—The Lecturer: Well, have it so, my friends. (Laughter.)—The Chairman said that as it was 10 o'clock, the meeting must close.

We court the most learned opposition of reasonable men, but when a stupid and ignorant spirit of opposition manifests itself, we should advise our Portsmouth friends to go to work privately and quietly. Why not start a class for mutual instruction and discussion, and then form a branch of the U.Z.S.?

### THE OLD BEDFORD LEVEL.

In the year 1870, the "Old Bedford" Canal, Near Downham Market, Norfolk, was flat—level—horizontal. It was proven to be so by Alfred Russel Wallace, Esq., F.R.G.S., &c. The one witness is the writer. He was with Mr. Wallace the whole week of preparation for the final experiment—differing from those first contemplated—on the fifth day of March, 1870. The supposed winner of the £500, staked by Mr. Hampden knows he won the money, but *not* the wager! He would not permit his referee, Dr. Coulcher, to argue the matter with Mr. Hampden's referee, the writer; and the meeting of the two referees, who, by the terms of the engagement, had to come to an agreement concerning the *result* of the experiment, was brought to a close by the writer being pushed out of Dr. Coulcher's house by a policeman who had been called in by the doctor (an astronomer), with the words "Go, or I'll take you!" No argument could be used—no decision arrived at.

In London, the evidence was referred to Mr. Solomon, optician; but this gentleman had nothing to do with it: he entrusted it to his assistant! This assistant, when appealed to by the writer, informed him that he had had the papers "for an hour or two"; that he didn't sit up all night over them; and that, "taking into consideration the theory of the earth's rotundity, he certainly did give it as his opinion that, if anything had been proved, it was that the water was curved." But this gentleman was soon convinced that he had made a mistake. He went to Mr. Walsh, the umpire, and begged him to defer the printing of his decision in his paper, *The Field*, until he gave a better report. But the editor would not! The decision was published; and a more glaringly inaccurate statement it is hard to conceive possible for an

editor to make. The very locality of the experiment was stated as a place six miles away from the scene of action! The money staked—£500 aside—was handed over to Mr. Wallace on the 1st of April, 1870. And justice was outraged! Can Mr. Wallace deny this? Is the Bedford Canal curved up in the middle of six miles to the extent of 5 ft. to-day. If not to-day, then not in 1870!

It was the night before the final experiment that Mr. Wallace, at the Crown Hotel, Downham Market, produced a paper he had had for several days—a diagram of the proposed undertaking on his part, to prove the curvature! And it was handed to the writer and has been in his possession ever since. And he wrote upon it these words:—"Friday, March 4th, 1870. Mr. Wallace's diagram in the presence of Mr. Coulcher, Mr. Hampden and self." There are the seven six-foot posts (signals) one mile apart, the centre-one being above the others as they are arranged around a section of the earth's curve! And to the extent of 5 ft. too! What a blunder! To fancy *the earth* so small a thing that its rotundity could be made visible in six miles! It is impossible that a thinking man can be found to-day, to believe this? And that, looking through a telescope, the water appeared *to rise and to fall* to the other end of the six miles—the view taken in both ways? Why, the spectator must have been three miles from the very summit of his little globe! The thing is too preposterous for calm discussion! If men really *believe* such nonsense as this, we can only say, God help such men and make thinkers of them! The view appearing exactly the same from each end was proof enough for Mr. Wallace that the canal was level! See him at the Crown Hotel, on the Sunday—the day after the experiment—He says:—"I can't think what this ticking is; I've heard it all day long—just like a death-watch! there; don't you hear it?—at perfectly regular intervals—*tick, tick, tick!*" And then we all heard it.—Mr. Coulcher, Mr. Hampden, Mr. Wallace and the writer—"Tick, tick, tick, tick!" "It's the stove cracking!" says Mr. Coulcher. What does Mr. Wallace, the spiritualist, think about the *cracking stove* by this time? How could a winner of £500 sit all day brooding over his loss!

The reports of the experiment—made with two signals and the cross-hair of the telescope as a third—were accompanied with drawings of the views, by Mr. Carpenter and Dr. Coulcher, strange that the *un-attested* drawings of the doctor should have been fixed upon by the author of "Zetetic Astronomy," as suitable for the pages of his grand work, while those of his old pupil were ignored!

But a volume could be written showing by incontestible evidence, that the three signals were in a straight line, and that a curved surface

of the Old Bedford Canal, instead of being shown to exist, was as positively disproved as anything could possibly be in this world!

WILLIAM CARPENTER.  
Baltimore, Maryland, U.S.A.,  
March 26th, 1894.

[We should have been glad, if, apart from all personal matters, Mr. Carpenter had described the experiment itself more fully, and shewn where it failed to support Mr. Wallace's contention. Older Zetetics understand it, but our younger members may not. Perhaps to enlighten these, our friend, Mr. C. will oblige us with a further article? *Ed. E.R.*]

### LECTURES.

LECTURES have been given by Mr. Chilton at Cheslyn, Hay, and Brewood, near Wolverhampton. The local press report says, he "gave a lucid and interesting lecture, and replied well to his critics, and defended himself in an admirable manner."

LECTURE was also delivered in Highbury, London, by Mr. Isaac Smith, of Halifax, followed by a "Debate" in which the Editor defended the Zetetic positions.

### MAP PROJECTIONS.

"The maps of this atlas (Public Schools Atlas of Modern Geography—Longmans & Co.) are of course drawn like those of all other atlases, on the projections which were employed two centuries ago, which served very well at a time when men had very vague ideas of the true outlines of continents and countries. Spain as it appears in the map of Africa is quite another Spain from Spain in the map of Europe, and so with many other cases. But probably in three or four centuries more truthful projections will come into use."—From *Knowledge*, March 1887, by R. A. PROCTOR.

What a lovely thing the word "science" is! There was an old lady who, in times of trouble and anxiety, always found comfort and peace in "that blessed word, Mesopotamia." But that aged person is not in it with the old women who find a solace in that blessed word "science." The latest thing in "science" is the "Interstellar Medium." Space is not void, we are to believe as commanded by "science," but it is filled with a kind of stuff called ether. It conveys lights from the stars at, say, the rate of 186,300 miles per second. Light comes in waves. The waves have a mean value of 50,000 to the inch. Thus light comes 60,000,000,000,000,000 waves in one second of time. Some stars, according to Herschel, take 300,000 years to send their light to our earth! Go on, work it out!! When found, make a note of it, and then say "science" doesn't want about 1,000 times more faith than Christianity, if you can! From *Lux*, Jan. 13th, 1894.

# THE EARTH—NOT A GLOBE—REVIEW.

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 8.

JULY, 1894.

PRICE 2D.

## OUR EARTH MOTIONLESS.

DEFINITE CONCLUSIONS OF SCIENCE.

A popular lecture proving that our earth neither rotates upon its axis nor around the sun.—Delivered at BERLIN by DR. SHEFFER.

(Continued.)

To prove the impossibility of the second proposition, *i.e.*, the revolution of the earth around the sun, will present no difficulty. We can bring self-evident proof to the contrary. *The earth revolves around the sun and is retained in its orbit by the strength of the solar attraction*, and these propositions contradict, point blank, the fundamental law of gravitation itself. It is known to everyone that the direction of the weight is perpendicular to the wall, otherwise the grain of dust would fall. In the same way the direction of the weight of our planet must be perpendicular to the sun, as to the centre of its attraction. But such, in fact, is not the case at all. The direction of the earth's weight is not only not perpendicular, but even changes with every moment.

In order to prove the correctness of my observation, we will now examine more carefully the modern theory of the annual rotation of the earth around the sun, and we will examine it under the aspect in which it is treated in the scientific works that discuss this subject. To explain the change of seasons, in other words to demonstrate the solar ecliptic, the scientists have *assumed* the following position: The earth's axis inclines to its orbit at an angle of  $66\frac{1}{2}$  degrees; this angle is preserved by the earth during the whole time of its rotation around the sun *i.e.*, the axis of the earth is parallel to itself at every point of its transit. We can make this theory approximately clear to ourselves by the following illustration: Taking this candle for the sun, we will now revolve around it this little globe, so that, by a simple practical experiment, we may form for ourselves an idea how the four seasons take place. . . . [diagram 1 omitted]. Here on the diagram we can plainly see that the axis of the earth does not change its position with relation

of the Old Bedford Canal, instead of being shown to exist, was as positively disproved as anything could possibly be in this world!

Baltimore, Maryland, U.S.A.,  
WILLIAM CARPENTER,  
March 26th, 1894.

[We should have been glad, if, apart from all personal matters, Mr. Carpenter had described the experiment itself more fully, and shewn where it failed to support Mr. Wallace's contention. Older Zetetics understand it, but our younger members may not. Perhaps to enlighten these, our friend, Mr. C. will oblige us with a further article? *Ed. E.R.*]

### LECTURES.

LECTURES have been given by Mr. Chilton at Cheslyn, Hay, and Brewood, near Wolverhampton. The local press report says, he "gave a lucid and interesting lecture, and replied well to his critics, and defended himself in an admirable manner."

LECTURE was also delivered in Highbury, London, by Mr. Isaac Smith, of Halifax, followed by a "Debate" in which the Editor defended the Zetetic positions.

### MAP PROJECTIONS.

"The maps of this atlas (Public Schools Atlas of Modern Geography—Longmans & Co.) are of course drawn like those of all other atlases, on the projections which were employed two centuries ago, which served very well at a time when men had very vague ideas of the true outlines of continents and countries. Spain as it appears in the map of Africa is quite another Spain from Spain in the map of Europe, and so with many other cases. But probably in three or four centuries more truthful projections will come into use."—From *Knowledge*, March 1887, by R. A. PROCTOR.

What a lovely thing the word "science" is! There was an old lady who, in times of trouble and anxiety, always found comfort and peace in "that blessed word, Mesopotamia." But that aged person is not in it with the old women who find a solace in that blessed word "science." The latest thing in "science" is the "Interstellar Medium." Space is not void, we are to believe as commanded by "science," but it is filled with a kind of stuff called ether. It conveys lights from the stars at, say, the rate of 186,300 miles per second. Light comes in waves. The waves have a mean value of 50,000 to the inch. Thus light comes 60,000,000,000,000,000 waves in one second of time. Some stars, according to Herschel, take 300,000 years to send their light to our earth! Go on, work it out!! When found, make a note of it, and then say "science" doesn't want about 1,000 times more faith than Christianity, if you can! From *Lux*, Jan. 13th, 1894.

# THE EARTH—NOT A GLOBE—REVIEW.

"To Him that stretched out the Earth above the Waters; for His mercy endureth for ever."—Psa. 136 : 6.

No. 8.

JULY, 1894.

PRICE 2D.

## OUR EARTH MOTIONLESS.

DEFINITE CONCLUSIONS OF SCIENCE.

A popular lecture proving that our earth neither rotates upon its axis nor around the sun.—Delivered at BERLIN by DR. SHEFFER.

(Continued.)

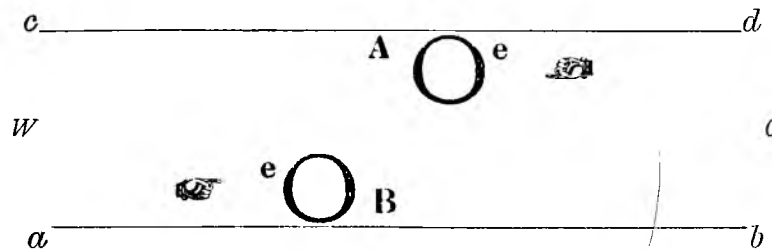
To prove the impossibility of the second proposition, *i.e.*, the revolution of the earth around the sun, will present no difficulty. We can bring self-evident proof to the contrary. *The earth revolves around the sun and is retained in its orbit by the strength of the solar attraction*, and these propositions contradict, point blank, the fundamental law of gravitation itself. It is known to everyone that the direction of the weight is perpendicular to the wall, otherwise the grain of dust would fall. In the same way the direction of the weight of our planet must be perpendicular to the sun, as to the centre of its attraction. But such, in fact, is not the case at all. The direction of the earth's weight is not only not perpendicular, but even changes with every moment.

In order to prove the correctness of my observation, we will now examine more carefully the modern theory of the annual rotation of the earth around the sun, and we will examine it under the aspect in which it is treated in the scientific works that discuss this subject. To explain the change of seasons, in other words to demonstrate the solar ecliptic, the scientists have *assumed* the following position: The earth's axis inclines to its orbit at an angle of  $66\frac{1}{2}$  degrees; this angle is preserved by the earth during the whole time of its rotation around the sun *i.e.*, the axis of the earth is parallel to itself at every point of its transit. We can make this theory approximately clear to ourselves by the following illustration: Taking this candle for the sun, we will now revolve around it this little globe, so that, by a simple practical experiment, we may form for ourselves an idea how the four seasons take place. . . . [diagram 1 omitted]. Here on the diagram we can plainly see that the axis of the earth does not change its position with relation

to the earth's orbit during the whole time of the earth's rotation, *i.e.* it remains parallel to itself. It is only by conceding this that we can explain the four seasons of the year. To this point the modern theory appears perfectly satisfactory, but if we examine it more carefully, its inconsistency will become evident. Thus I will now touch at once that incomprehensible and, at the first glance, unobserved circumstance, which has always appeared to me absurd, whenever I had to explain to my audience the rotation of the earth around the sun.

As it would be absurd to suppose that the sun, during the yearly revolution of the earth, in its turn daily circumscribes the earth, modern theory, to meet the necessity of the case, has to suppose that the terrestrial globe, while rotating yearly around the sun, turns daily around its own axis in the direction from west to east. But such two simultaneous rotations are, as we shall directly see, perfectly inadmissible. During the interval from the 21st of June to the 22nd of September such two simultaneous motions coincide well enough, but from the 22nd of September onward, and back to the 21st of June, the juxtaposition of such two motions carries us on directly to a perfect absurdity; it would follow that the terrestrial globe, rotating diurnally around its axis from west to east, moves onward in a direction quite the opposite. But I believe that everyone is aware that a moving body, according to the nature of its rotary motion, either receives an impulse forward, or, on the contrary, the impulse forward directs its rotary motion. Consequently, if the terrestrial globe rotates from west to east, then it must also proceed onward in the same direction, and, in case of a sudden appearance of some new force, compel the earth to deviate from its primal direction, the force which makes the earth to move around its axis must (if it is the stronger) either overcome the newly manifested force or be destroyed by it.

FIG. II.



If we compare the two halves (or parts) of the terrestrial revolution around the sun, to wit, the semi-revolution from W to O, through B, with the semi-revolution from O to W, through A, we find that, from W to O, the direction of the rotation agrees to a certain point with the direction of the motion, and from O to W it is directly opposite to its

onward motion. This will best be seen if we rotate this sphere around the lighted candle in the same manner as represented for the earth as Fig. 1. In order to explain such a strange contradiction we ought to suppose that, during the revolution of the earth around the sun, the direction of the terrestrial weight is also changed, but this would amount to an absurdity, and something in direct contradiction to the accepted formula, that the direction of the terrestrial weight depends on the sun, as on a body which keeps the earth in its orbit. Fig. 2 will explain the whole still plainer. If the globe, *e*, is compelled to rotate towards *O*, in the direction pointed to by the hand, and move onward from *a* to *b*, and from *d* to *c*, then, in its motion from W to O, it must have the direction of its weight on the line *a, b*, and in its motion from O to W, on the line *c, d*, to wit, in the first case, have its weight directed downward, and in the second case upward. Although in the universal space there exists neither an up nor down, the question itself is unaffected by that circumstance. Presently we will return once more to this question and prove that such an incessant change of the direction of the terrestrial weight is in direct contradiction with science.

According to the now prevailing modern view, the earth is kept within its orbit by the force of the sun's attraction. But even this proposition contradicts the assumption of the dual rotation of the earth, unless we make such allowances as will contradict all our scientific notions, for it is impossible to imagine to ourselves two simultaneous motions of the terrestrial globe around its axis, and around the sun, in agreement with the *change* of years and that of the seasons, during which the direction of the terrestrial weight would be constantly turned toward the sun, as we ought to find it were the earth supported in its orbit by the force of the attraction of the sun. It is supposed that in every circuitous motion there are two forces in action. For instance, if we attach a ball to a string, and swing it around so that the cord will be extended out straight, then the one force, which tends to project the ball in a straight line from the centre, is named centrifugal force, and the other, contained in the very cord itself, shows a tendency to draw back the ball toward the centre round which it revolves, and is called centripetal force. During the simultaneous activity of both the forces the ball cannot move on a direct line on which both forces tend to move it, but is forced to adopt a movement in the direction of a diagonal, and, from the union of an infinite number of such diagonals, it begins moving in a circle.

If we examine a little more carefully this circuit-motion of the ball, we will find it anything but complex. That point of the ball to which is attached the cord, *i.e.* near which acts the centripetal force developed by my hand, lies on that side of the ball which is directed to the centre of the movement, *i.e.* in the direction of the hand, and, if the ball had a

propensity at the same time to assume a motion around its axis, then the latter would find itself at the same spot where the thread is tied, and this given point on the ball ought to remain turned toward the hand. That which is law for one body is law for all other bodies, placed in the same conditions as the first. The moon—the only heavenly body so close to our planet as that we can observe it in detail—is placed, in relation to her revolution around the earth, under precisely the same conditions as the ball we are now examining is, in relation to the point where the thread is fixed. Let us fancy the ball as the moon, the hand as the earth, and the thread as the terrestrial attraction, invisible in reality, but acting like the thread, and we will see that the moon is turned toward our globe always on the same side, for the force of attraction has deprived it forever of the slightest possibility to effect any change in the direction of the weight and rotation around its axis. Why then, not derive from the laws of motion regulating the moon, a very close deduction for our own planet? Indeed, if the terrestrial globe revolves around the sun, and is kept in suspension in its orbit through the attraction of the sun, then this globe, as well as the moon, must find it impossible to rotate around its axis. In such a case, the one side of the earth would be constantly lighted by the sun, while the other would find itself in perpetual darkness. But we see no such thing, therefore we must infer that the modern explanations of the movements of our planet around its axis and the sun are devoid of the least probability, and disagree entirely with the exigencies of experiment.

Perhaps we might suppose that the terrestrial globe occupying a central position, revolves in twenty-four hours around its axis, while the sun describes annually above it that circle which is shown by the ecliptic. But there is no room for such a supposition until the rotation of the earth itself around its axis is demonstrated on more solid proofs; and, besides, as I have shown, it is the contrary, which can be most easily proved. The immobility of our planet is chiefly maintained by me on the principle that we cannot find in nature any constant atmospheric current always running from east to west. On the same principle, if our planet revolved around the sun, its whole atmosphere ought to be retarded and forced in a direction contrary to the forward motion of the earth, and would have to follow our planet like a long tail, as we see in the case of comets. Of whatever substance may be the tail of the latter, we are forced to examine it as the atmosphere of these as yet but little known bodies, and if the comets themselves travel in the universal space, then their atmosphere is compelled to follow them in the shape of a luminous tail.

Finally, let us return once more to the law of gravitation in order to demonstrate conclusively that the rotation of the earth around its axis

and the sun is an utterly improbable hypothesis. A little further back, while repeating to you in substance the theory now thoroughly accepted of the earth's revolution, I have shewn that, as the theory now stands, the position of the terrestrial weight must inevitably be shifting at every second. Out of this would result the following: If the sun really retains the terrestrial globe in its orbit, then the direction of the terrestrial gravity must constantly tend from the centre of the earth toward the point fixed on its surface at that side which is turned to the sun; on this point acts, immediately, all the centripetal force proceeding from the sun, and, therefore, as in the instance of the moon when the centre of all the lunar gravity is concentrated on that side of her is turned to us, it is to this point that must gravitate all the weight of the terrestrial globe as all the weaker and lighter bodies. But our experiments show to us quite the contrary: the centre of the earth's gravity does not change in the least, and placed in its middle, depends only on the terrestrial mass; no outward force of the kind of the sun's attraction is able to affect it in any way, or can force it to displace itself. And if so, then do not such facts prove fully and clearly (1) that the terrestrial globe is not kept in its orbit by the sun's attraction, because such an enormous force could not but affect the point where is concentrated the centre of the earth's gravity; and (2) that the centre of the earth is at the same time the centre of its weight, and also the centre of all the visible universe? Of course, I do not reject entirely the influence on our planet not only of the attraction of the sun, but also of the moon, but I only maintain that the force of their attraction is not so powerful as to influence, in any serious way, the solid portions of the terrestrial body, when we find that even with fluid and gaseous bodies, especially such as the air, this influence is felt but to a very feeble extent. If the attraction of the sun is so trifling that it can act but in quite a slight and to us as yet not quite clear manner on fluidic bodies, then we have still less reason to suppose that such a weak force could neutralize the centrifugal force of the earth and keep it in its orbit. For such an effect as this a force of gigantic proportion would be required—a force under whose action all the terrestrial atmosphere would long since have been carried off to the sun, in the same way as the force of attraction of the terrestrial globe is ever ready to attract to itself every just forming lunar atmosphere.

Let us now see what changes would be called for in the same department of astronomy were my assertions to be some day verified, and it should be found that the earth is motionless, and occupies the central position of the visible universe. Such changes would be in some respects important, in others unimportant. They would chiefly consist in our henceforth regarding the hitherto seeming motion of the heavenly bodies as a real motion, as the astronomer Tycho de Brahe did before.



He maintained that the earth stands still in the centre of the universe, and around it, as around its natural centre, moves diurnally the whole heavenly sphere; the moon and the sun in addition to the above motion describing around the earth independent movements on special curves, while Mercury with the rest of the planets describes an epicycloid. . . . I may also add that the position assumed by our scientists who consider the fixed stars as suns of the same nature as our own, and all the other planets as bodies identical in substance with our earth, will be found to be without foundation. Such a theory is irrational, if it were only because of the principles on which are based the determination of circumferences and weights of the celestial bodies. The weight of the sun, for instance, was determined in accordance with the amount of the expression of its imaginary attractive force on the surrounding planets. As soon as it is found that the sun must surrender its office of principal star and become simply a planet revolving around the earth, directly depending on the force of the latter's attraction, all previous calculations will naturally be proved erroneous. The sizes of the heavenly bodies have been determined on no less false principle.

Who but is more or less acquainted with that phenomenon which shows us an object diminishing in proportion to the distance, so that if an object is placed at a distance which exceeds 5,000 times its diameter, the human eye is unable to see that object? It is on the basis of this law that the sizes of all the heavenly bodies have been calculated. According to their seeming size and the ratio of their distance from the earth, science has endeavoured to determine the number of times that their real size surpasses their seeming one. But in determining by that principle our scientists have neglected to consider one of the most important points; they forget that the law which makes objects apparently diminishing in proportion to their distance from the observer does not affect luminous bodies; the brighter the light of the body the longer its bulk will remain unchanged in our sight, whereas an object but faintly lighted becomes invisible, as I have said, at a distance which exceeds its diameter 5,000 times. If the said law extended to luminous bodies, then a flame one inch wide could not be seen at the distance of 225 yards, whereas we know from experiment that the size of its apparent bulk does not change even when the candle is carried to a distance of several thousand yards. As the sunlight is extremely bright, the bulk of the sun must therefore seem unchangeable at an extremely long distance, and it is very possible that the sun in reality is but little bigger than it seems to us at the distance. Besides that, it is not only possible but a great deal more plausible to accept the assumption that the laws which shew to us an object diminishing with the distance are applicable only to our own dense atmosphere which surrounds us, and are not operative in a medium so rare as that of the upper spheres. When,

after a clear and cold night, the vapours of the air are drawn down to the earth, and the rising sun illuminates the air cleared from the mist, then the mountains, the villages, the environs and edifices, at other times hardly delineated in the blueish atmosphere, suddenly rise before our eyes as if growing up by enchantment; they seem nearer and allow us to examine the slightest details of their structure. In this case the law of the diminution of objects is evidently changed. And there in the ether, in that attenuated matter—or rather let us only speak of ether as empty space—in this vacuum of the universe how can these laws be ever applied? Generally speaking, as far as I know from personal experience, the *science of optics* is not quite accurate, the sight of the human eye is more or less influenced by the purity of the atmospheric air. . . .

Equally erroneous will be found all the determinations of distances of the fixed stars, once that we have to regard the earth as fixed. According to the now accepted and wholly dominant theory, on the 21st of December the earth is 40,000,000 miles (185,000,000?) from the point at which it stood on the 21st of July (June?) On these same dates, with the help of the telescope, directed to one and the same point of the heavens, is observed a certain star which crosses the meridian in the same direction and in the same point of the heavens. It results then that a distance of 40,000,000 miles (185,000,000?) counts as nothing in our comparison of the distance of the observed star! But even such an evident proof of the recision of the fixed stars from the earth loses certainly all its weight if we assume the earth to be motionless.

And now, gentlemen, allow me to lay before you one more contradiction, which, had it been insisted upon before, might have shewn to our scientists long ago the erroneousness of our astronomical calculation. It was found from the determination of the sun's attraction that every body which exerts on the terrestrial globe a pressure of one pound exerts on the sun a pressure of 27 pounds. If all bodies act on the sun with such an increased pressure, it would then seem that the mass of the sun ought to be likewise and in the same proportion more compact than the terrestrial mass, *i.e.*, it would consist of a more dense matter; and yet, by comparing the calculations of the weight with those of the circumference of the sun, it has been found that the sun's matter is just four times less in density than the substance out of which the earth is formed. The result, then, would be that one and the same body would weigh on the sun 27 times more than when on earth, and its weight would act on the sun 108 times more than it would on our planet; and yet the substance of the sun would present but  $\frac{1}{4}$  of a part of the density of the matter of the terrestrial globe! This, I must say, is incomprehensible to me, and I view such a theory as the result of correct calculations based on a false principle.



I also deny the existence of the atmosphere on any planet whatever. A heavenly body crossing the universe with a velocity hardly comprehensible cannot be possessed of an atmosphere similar to the air of our earth. And here, as before, the moon—a planet with the qualities with which we are best acquainted—gives us a fully correct comprehension, or rather it corroborates all that is shown to us by the natural laws. The moon has no atmosphere, and, therefore, there is but little probability that the other planets would have any more than she has. All the observations tending to shew that the moon must have an atmosphere are based, no doubt, on equally erroneous principles; they could be accepted with any degree of certainty only when the experimenter could be carried beyond the atmosphere of the earth, or, at the least, when we should build our observations on the summit of Dhawalaghiri. The outer surfaces of the body of the sun, moon, and other planets cannot be similar in appearance to the surface of the terrestrial globe; they must consist of strongly compacted matter, such as we see sometimes in the substance of the frequently falling aerolites. All the non-solid bodies, the strata of the earth, and the rocky portions would be torn off and precipitated on the earth by the force of its attraction. Thus, on the ground of these premises, the assumption that some of the planets may be inhabited is void of any probability and has to pass into the realm of fiction.

Man, while determining the distance of the stars most important to us, on the strength of an imaginary rule of distance and falsely applied laws of the diminution of objects in proportion to their recession, began to calculate the size of these stars, and, astonished at their dimensions, mistook the fixed stars for bodies similar to our sun, and our earth for a very unimportant portion of the whole universe. Arrived at the latter conclusion, it very naturally appeared absurd to him that all these powerful, all these gigantic and numerous celestial bodies should revolve around our little globe, obey it, and submit to its desires. At that time appeared a new hypothesis: the earth is not motionless, it revolves around itself and around the sun. This theory is accepted as the correct one, and step after step are now built new suppositions, new combinations deduced from the union and combination of imagination with correct mathematical calculations.

Here I end my dissertation, although it would be but an easy matter to point out a great many more contradictions on which rests the modern theory which I now combat and is opposed to mine. We cannot help desiring and hoping that perchance there may be found at least one astronomer who, armed with all the weapons of modern speculative science and its apparatus, will undertake to re-create the whole system of Tycho de Brahe. The result of such an attempt would doubtless prove something scientifically grand. All that now under

the Copernican system appears to us so incomprehensible and diametrically opposed to the fundamental laws of nature would be finally explained in the simplest and most rational way. We can now see how right was the venerated astronomer Bandes, when, expressing his opinion on Tycho de Brahe's system, he remarked, "This theory presents in itself a great deal more of probability, as it explains so well all of the individual phenomena of nature." Unfortunately, Bandes was mistaken when he imagined that this system contradicted the laws of attraction. But I believe I have fully disposed of such a misunderstanding, and proved that it was not Tycho de Brahe's system, but that of Copernicus, which contradicts all the laws of gravitation.

To add a few more proofs to our assumption we will say:

1. That the form of the continents contradicts the theory of the rotation of the earth. If our globe were revolving around its axis, then the outlines of the continents ought to elongate themselves in a direction from east to west, when in reality this elongation of configuration extends from north to south.

Besides that, the width of their northern edges arises from the attractive force of the northern pole, and the points turned south from the repulsive force of the south pole.

2. There are no fixed stars in the sense of this word, because it has been observed that these stars, besides their diurnal revolution around the earth, perform independent circuitous movements. Vain have been all the efforts of the astronomers to find a central body whose force of attraction might account for the fact that these stars are kept within their orbits; and such a body must exist somewhere. This central body is our earth. May it not also explain the fact that the greater the accumulation of soil in the northern hemisphere the larger is the number of stars above?

3. Various changes in the fixed stars have been often remarked, namely a change of colour or the intensity of light, and sudden appearance and as sudden disappearance of single stars—which does not at all agree with the assumption that they are as large and independent bodies as it has been hitherto supposed.

4. The similarity in the component parts of all the meteorological masses, that is to say, of the bodies attracted by the force of gravity within the earth's atmosphere, gives us chiefly some idea of composition of the mass of all the heavenly bodies, and proves that they cannot be inhabited. The greatest aerolites known to us had a diameter of 7 to  $7\frac{1}{2}$  feet.

5. According to the exact researches of Wilhelm Malman, in the middle latitudes of the temperate zone the prevailing atmospheric current appears to be W.S.W. Although agreeably with the law of terres-

trial rotation the prevailing winds ought to be found in those regions easterly, we see the contrary and find them westerly.

As my following work will tend to demonstrate the agreement in the progression of the creation of the universe with truth and fact, and taking into consideration that this pamphlet of mine (the only reasonable refutation of the earth's rotation) shows a similarity with the opinions of many scientists who preceded me, in conclusion I wish to quote a few words from Goethe. The poet, whose prophetic views remained during his life wholly unnoticed, said the following: "In whatever way or manner may have occurred this business, I must still say that I curse this modern theory of cosmogony, and hope that perchance there may appear in due time some young scientist of genius who will pick up courage enough to upset this universally disseminated delirium of lunatics." . . . From the "*Scientific American*," April 27th, 1878.

[We should be glad to see a copy of Dr. Shæpfer's further work, referred to above. He has made great advance on the way to Truth, but before constructing any new system of the universe, he should first ascertain experimentally and definitely the shape of the earth we live on.—ED. E.R.]

## THE WISDOM OF GOD

IN THE CREATION OF THE WORLD.

(By Lady Blount).

1. *What is wisdom and what its value?* Wisdom consists of the knowledge of God, His ways, His works, and His revealed purposes. Its value is inestimable, for "who findeth me findeth life, and shall obtain a favour of the Lord." . . . "All they that hate me love death."—Prov. 8 : 35.

2. *Where may man find Wisdom?* "The fear of the Lord is the beginning of Wisdom."—Prov. 9 : 10. Those who despise this fountain are therefore void of Wisdom.

3. *How did God create the World?* "The Lord by Wisdom hath founded the earth; by understanding hath He established the heavens."—Prov. 3 : 19.

4. *When did God create the heavens, (or the planets?) and the earth?* "In the beginning God created the heavens and the earth."—Gen. 1 : 1.

5. *When was the beginning?* We are not directly told. Some compute that according to the lives of the patriarchs, and other dates given in the Bible, it was nearly 6,000 years ago. Jesus shews that the "beginning" occurred at the time of the creation of Adam and Eve.

6. *Through whose instrumentality did God create all things?* Through the Christ "The Word." "All things were made by Him, and without Him was not anything made that was made."—John 1 : 3.

7. *Was there a time when the World was not?* Yes, for we read; "Before the mountains were settled, before the hills was I brought forth; While as yet He had not made the Earth, nor the fields" (*open plains*, margin).—Prov. 8 : 25.

8. *In how many days were all things created?* In six literal days. "For in six days the LORD made heaven and earth, the sea, and all that in them is, and rested the seventh day, wherefore the LORD blessed the seventh day and hallowed it."—Ex. 20 : 11. As the seventh day sabbath was literal so also must the other days have been literal.

9. *What did God create on the first day?* Light, which God called "Day," and He divided the light from the darkness which he called "Night." Hence light was made before the sun.

10. *What did God make on the second day?* The Firmament, or a strong and solid expanse over-head, made to divide the waters which were above the firmament from the waters below the firmament.

11. *What proof have we that the Firmament is solid?* The word "firmament" has this meaning, and it is described as sky, which is "strong, and as a molten looking glass."—Job 37 : 18. Its purpose also shews this, as it has to support the waters which are "above" the firmament.

12. *What did God make on the third day?* He gathered the waters together unto one place, which he called "seas," and made the dry land appear, which He called "Earth," and the grass, the herbs and the trees all yielding fruit after their kind. Thus the *land* only is called "Earth" in the Bible.

13. *Did God create the Earth moveable?* No, He laid its "foundations," that it should not be moved forever, or until the ages. "The world also is established that it cannot be moved."—Psa. xciii : 1.

14. *To what may we liken the Earth?* We may liken it to a vast flat and floating vessel, fastened by its foundations like an anchor. "For He hath founded it upon seas, and established it upon the floods."—Psa. 24 : 2.

15. *What did God make on the fourth day?* The Sun and the Moon, and the Stars to divide the day from the night. These are "lights" only, and are all intended for this world. God said;—"Let there be lights in the firmament of the heavens to give light upon the Earth: and it was so."—Gen. 1 : 15.

16. *Do not the theories of Modern Astronomy discredit this account of Creation?* Yes, they contradict the teaching of Moses, which the Christ endorsed, in saying that the stars are worlds, &c. The Bible never speaks of but *one* world, or *comos*; and it calls the stars mere "lights," and the sun a "greater light," and the moon another and independent light. Now it is absurd to make a "light" or a lamp, one

million four hundred and nine thousand seven hundred and twenty-five times the size of the place to be lighted. Astronomy also contradicts the Word of God in calling the moon an opaque dark body in itself, for the Bible clearly states that God made *two* great lights, the sun and the moon, while Astronomy affirms that the moon is only a reflector. But no sphere would reflect light over a full disc, as the moon does: hence she cannot be a reflector. Besides, moonshine is very different in its nature from sunshine.

17. *Is there any other reason recorded for the Creation of the Sun, Moon, and Stars?* Yes, not only to give light upon the Earth, but for "signs," and for seasons, and for days and for years, and to "rule" over the day and over the night. "And God said, Let there be lights in the firmament of heaven to divide the day from the night, and let them be for signs, and for seasons, and for days and years—Gen. 1: 14.

18. *Have the Stars ever been used as signs for man?* Yes, prophets and wise men of old understood their signs, and the Magi, or astrologers, were guided by them, at the birth of Jesus. We are also told that the stars shall fall from heaven, and the sun be turned into darkness before the great day of judgment.—Joel. 2: 10-31.

19. *Of what shape is the earth and sea taken together?* On the surface it appears to be round as well as everywhere flat, for we read;—"It is He that sitteth upon circle of the earth, and the inhabitants thereof are as grasshoppers: that stretcheth out the heavens as a curtain, and spreadeth them out as a tent to dwell in."—Isa. 40: 22. Again, "He that created the heavens, and stretched them out; He that spread forth the Earth."—Isa. 42: 5.

20. *How may we know that the earth or land is like an island, or series of islands?* Because men have sailed around the earth, as around an island, and Peter says it is standing (as a ship at anchor) "in the water and out of the water." He also says that some are "willingly ignorant" of these facts; that is, they are not willing to learn when someone is ready to teach them these things.—2 Peter 3: 5.

21. *Is the fact that the masts of a ship approaching the shore are seen before the hull any proof that the world is a Globe?* None whatever, because this is explainable by the laws of perspective; and after a ship has wholly disappeared from the vision of the naked eye, it can often in calm weather be restored to view by a good telescope. See E.R. 4.

22. *How should we look upon human wisdom, when it conflicts with Divine?* With distrust, for theoretical "science" is mere speculation. The Creator is surely wiser than the creature; and "the wisdom of the world is foolishness with God."

23. *What then should we do?* Reverently study His Works and His Word, so that we may gain wisdom, learn to trust Him better, and

obtain that Eternal Life which He has promised through the Messiah to all them that love Him. Read Psa. iii.

24. *Why attach so much importance to this question of the Earth's shape?* Because it proves the Bible is true; and because the endless life which God promises is to be spent with the Christ (when he returns) upon the renewed earth. Matt. 5: 5; 6: 10; and Rev. 5: 10.

### TO OUR READERS.

With this issue "Zetetes" will cease to be the editor of the E.R. Two months ago we placed our resignation (to take effect after No. 8 was issued) in the hands of the Secretary of the U.Z.S. This gave the Society ample time to find a fresh editor, and us an opportunity to conclude Dr. Shœpfer's important lecture. We have been reluctantly impelled to take this course through failing health, and the pressure of other work which could not be given up without neglecting the duty of doing something to try to obtain the bread which perishes. Our labour has been a labour of love. It is an honour to be allowed to stand up as a witness (a Pro-testant) for the truth of God's Word. We trust others will be raised up for this important work. We have endeavoured to teach our readers to think for themselves, and not allow the crude theories of sceptics, or scientists, to be forced upon their mental digestions. This has often been done at the expense of our own physical digestive organs. But truth is precious; and there are truths in the Holy Scriptures which, if discovered and followed, will lead to eternal health and life. We trust our readers will follow on to know these truths, and we shall be glad at any time to send free papers or tracts thereon, for postage only. What is the use personally of finding out that the Bible is true if we do not go on to discover the great object of its revelations. Still it is a good work to try to prove to others the perfect reliability of the Holy Scriptures; and we trust our friends will not slacken their efforts herein. All should help. The burden has hitherto fallen upon a few. All honour to these friends. Still go onward. Our little bark, the E.R. has now been fairly launched out into the deep. We are grateful to God for being allowed to share the honour of bringing her so far; and we cannot bid our friends even a partial adieu without expressing our gratitude also to the brave comrades in London, Bath, Halifax, and Ashton, &c. who have granted us their kindly aid. To all our friends we would say, let our motto still be, ONWARD.

John Wesley, in his Journal, writes:—"The more I consider them the more I DOUBT of all systems of astronomy. . . . Even with regard to the distance of the sun from the earth, some (astronomers) affirm it to be only three, and others ninety millions of miles!"—Extract from Wesley's works, published by Mason, 1849.

## ROLL ON !

TO THE THEORETICAL GLOBE.

Roll on, thou mighty Ball apace !  
Through misty realms of endless space,  
In mad career and lightening race,

Roll on !

Although we suffer brain-wracked chills ;  
We cannot pause to mend our ills,  
Whirl-over ! oceans, valleys hills !

And never mind,

Roll on !

Roll on great giddy globe, mid-air,  
Through seas of ether dashing—where ?  
Drive all thy dupes to blank despair.

Roll on !

My mind is all a dizzy whirl !  
Can no one stop this fearful swirl,  
And let the flag of Truth unfurl ?

But never mind,

Roll on !

“ ICONOCLAST ”

(With apologies to W. S. Gilbert).

## CORRESPONDENCE.

*All Letters sent to the Editor should be legibly written on one side only of the paper, and should have some direct bearing on the subject before us. They must be accompanied by the name and address of the sender. Stamped addressed envelopes ought to be enclosed for replies. Short pointed letters or articles preferred.*

*The Editor cannot, of course, be held responsible for the various opinions of his correspondents; nor can he enter into correspondence respecting articles, &c, held over or declined. Letters must now be addressed to*

“ LEO CASTLE,”

c/o Mr. John Williams,

32, Bankside, London, S.E.

## NOTES.

*J. C. Akester, Hull.*—Accept our thanks for Count Mattei's Homœopathic remedies sent. We have lost all faith in Allopathy, but we are willing to give these tiny pillules a trial. The “ Science ” of Medicine is in as hopeless a state of confusion as that of Astronomy. We have sent you a copy of *Natural Food* which advocates a return to natural and Edenic diet.

*Bath.*—The promised article shewing the belief and Cosmogony of the early Christian “ Fathers,” so-called, should be very interesting, and it would doubtless be welcomed by the new Editor of the *Review*. We avail ourselves of this opportunity to thank your Ladyship for many past kindnesses, and trust you will still continue your interest in the Plane Truth. We are glad to see your poem, *The Nebular Hypothesis* is being republished in America. Truth is spreading.

*L. T. Jones, Baltimore.*—We do not know where you could obtain an English translation of the Astronomical works of Tycho Brahe. Perhaps some of our readers can tell.

*Henry Barnes, London.*—Why do you not send us a proof that the earth is a globe ? Your “ boys ” seem to be very sharp. Doubtless it is owing to the fact that they have such a clever father. But how is it they are in advance of you ? for Edward says ;—“ Both Frank and I know water is level fast enough.” If they really have this truth established “ fast enough ” in their precocious minds, can you explain to them, or to us either, the difficulty of finding level water on a spherical earth ? Their other “ difficulties ” are childish compared with this. Boys ! “ ask father ” to explain this for you, and then send on a copy of his “ explanation ” for publication in the E.R. When he has done this, we will, if health permit, attend to your other little difficulties.

*H.H.S., Bayswater.*—No ! we have not seen the book of Fables promised us by Mr. Score. It is perhaps not out yet. Thanks for what was forwarded. Respecting Job 26 : 7, the word “ earth ” in the Bible never includes the sea. It is not therefore, a synonym for the term “ world.” It refers to *land* only. See Gen. 1 : 10. Job is not speaking in the context of the World, but of *Sheol*, (*Hades*) and the *Abyss*. We speak of a plane being “ stretched out,” not a sphere. “ He stretcheth out the north, over *Tohu* ” (desolation—thus accurately describing the regions north long before the modern and mad attempts to reach the “ pole ”); “ and hangeth the earth (*land* only) upon (or over, Rev. Ver.) *Balyahma* ” (the emptiness, or nothingness of the abyss). “ Sur le néant,” French Ver. D'Ostervald Revissée. Dr. Adam Clark, a Newtonian, quotes a Chaldean version thus ;—“ He layeth the earth upon the waters, nothing sustaining it.” This points to Psa. 24 : 2. Dr. Bullinger sends the following translation ;—“ Stretching-out the-northern-heavens over (*al*) desolation (*tohu*) ; hanging the-earth over (*al*) not-what [i.e. not anything (solid)].” And he adds ;—“ As the heavens are stretched out having nothing (apparently) to support them, so the *eretz* (earth) is hung like them and has nothing *solid* to support it. That is, air is beneath the one, and water beneath the other.”

*Ulysses G. Morrow, Allegheny.*—Copies of your paper, *The Herald of Glad Tidings* to hand. We are glad to see you are so boldly advocating the PLANE TRUTH, and thank God He is raising up witnesses to the Truth in all parts of the World. Go on, and prosper in all truth.

*C.H., London.*—A most serious defect in your mathematical puzzle is (see E.R. May, p. 159) your assumption that the line S.N. is a straight line. As this represents a ray of light from the sun to the north centre, we deny that it is true to fact. Light from above does *not* travel in straight lines through a medium of ever increasing density. We hope (D.V.) yet to be able to make some revelations on this subject at some future time.

*R.I.P.*—We have no room for your many enquiries and very long letter ; but we shall try to squeeze in somewhere a brief reply to each point raised.

*W.H.E., Ind., U.S.A.*—Your long, rambling and illogical letter betrays you. It has, consequently, gone to its own place ; namely, the waste paper basket. We want facts, not fancies ; and reasons not ravings.

*W. Carpenter, Baltimore.*—Too late for this number.

## Letters to the Editor.

Seedley, Manchester.

Dear "Zetetes,"—I became acquainted with The Earth Review, through seeing it in Mr. Coleman's window in Manchester when passing. I have for about 9 years been satisfied in my own mind that the earth is "flat"; but I am hardly capable of convincing others. I believe you are one of the few who are really qualified for meeting the Modern Scientists on these matters, and I wish you "God Speed."

At the spontaneous request of a class of young men meeting in the Congregational School, I accepted the position of Teacher. I at once tried to provoke a spirit of inquiry among them, and have succeeded. I soon found that "Science" was destroying faith in much of the Bible in this School, as it is in the Churches, and among the People. Now the question is, Is Modern Science more reliable than the Bible?

I thought the questions enclosed might be interesting to you as shewing the state of mind of our young men. One, a Pupil Teacher, admitted he had never read anything against the Globe theory before. Science teaches its disciples not to question but to believe.

Yours in the Christ,  
G. HOBBS.

## CURVATURE.

Dear "Zetetes,"—The following appeared in "Tit-Bits," some time ago:—

The Captain of the s.s. *Milo*, referring to the question as to how far a powerful light can be seen, says: "The other day, when off Skagen, the rays from Hantsholmen lighthouse were distinctly visible, though the light was fully seventy-two miles away."

Mr. B. wrote and asked how the light could be seen unless the light-house was 3,500 feet above sea-level? This is the official reply he received.

Editorial Department,  
Tit-Bits, Dec. 21, 1892.

The paragraph you refer to was sent me by the Captain of the s.s. *Milo*, and he vouched for its accuracy. Under these circumstances I cannot enter into a discussion as to the possibility of his being able to see it or not. P.S.—Mr. B. allowed that the reported observation was made from a mast-head 100 feet above sea-level.

Surely this is a Tit-Bit proof that the earth is *not* a *Globe*, but that it is a vast irregular Plane.

Yours, &c.  
J. W.

Plymouth.

Dear Sir,—The Title of the Work about which you ask is "The Grand Old Book," by Rev'd A. M'Caig, B.A., L.L.B., Tutor at Pastors' College, London." Publisher: Elliot Stock, London.

The "Mercury" gave it unqualified praise, and winds up with:—"The whole book deserves most careful study, and will be prized by all who love their bibles and cling to them as 'the Word of God.'"

It is pitiful to think that a christian journal (C. Commonwealth) should be behind a daily paper in its appreciation of an effort to defend God's Word.

I thank you, heartily, for the pamphlets you kindly sent. I have, so to speak, imbibed the opinion of the sphericity of the earth from my babyhood, and it seems terribly iconoclastic to endeavour to shatter that opinion. On the other hand, I can see nothing to controvert in your tracts. To accept a flat, stationary earth, and a revolving sun, is certainly to render possible a literal rendering of many passages of Scripture which are commonly accepted as illustrative; e.g. the "foundations" of the earth."

You have at any rate made out a sufficiently good case to render unjustifiable the refusal of the C. C. a short time ago to open its columns for a discussion of the subject.

Yours faithfully,  
THOS. E. STEVENSON.

Glasgow, April 21st 1894

Dear Brother,—I got acquainted with the Truth of the "Earth a plane," through the Rainbow (Dr. Leask's articles), which were to my mind very convincing. I had a copy of your 'Cranks' from Brother T. J. Hitchcock. This truth has doubtless the grand simplicity that is characteristic of all God's Truth when known, but it has also its depth and profundity to engage profitably the most learned minds. It is truly amazing, that in view of plain outstanding testimony, and ocular demonstration of the great distance at which a light (45 miles off) can be seen, men should, knowing the illusory

character of certain states of the atmosphere, persist in their stupid plea of the Earth and the Sea's rotundity.

The blinding fascination of antipathy to truth, because it is Bible truth, is wonderful. Popular names, with a string of supplementary letters attached, wield an influence that to some minds seems irresistible. Such titles also carry a responsibility that is truly serious, and ought to make their possessors pause lest they inculcate error.

The simple Truth too simple is,  
Inscribed on Nature's page;  
For modern pride, which bolder grows,  
With each succeeding sage.

Hoping you are stronger,

I am yours in Christ,  
JAMES GRAY.

Dear Sir,—The *World of Wonders* by Cassell & Co., part I. gave an account of the Pendulum experiments at the Polytechnic in May 1851: Now do I understand this experiment rightly?

As the pendulum is fastened to the top of the Lecture Room, and once set in motion, its motion must vary as the earth is doing in its diurnal motion, so that in 24 hours the earth having turned a complete *topsy turvey*, the lecture room must have done the same, and the pendulum also, so that the leaden bullet would at one time find itself at the top of the room, instead of at the bottom—not suspended at the end of the wire, but being at the top of the wire suspended to the bullet!

If this is not what the theoretic donkeys are going for—what is it?

It may be my ignorance of the subject, but to me it is the greatest piece of nonsense I have yet seen on the subject.

Yours, &c., A. W.

Doncaster, May 8th 1894.

Dear Brother,—I enclose the extract from Proctor's article on Astronomy in the Encycl. Brit. It is the last edition, but the *volume* referred to was published in 1878. The series was not completed till 1887. I also send a paragraph from a novel by F. M. Crawford, a popular writer. It is a doctor into whose mouth the words quoted are put. The report of Dr. Schepfer's lecture is very important. They have a pendulum at S. Kensington which oscillates over a brass table, changing its bearing at each beat; but it only goes on for a short

time and is then stopped, so you cannot tell whether it returns after a longer time. This is cute of the authorities!

Yours sincerely,

H. C. BOWKER, M.A.

"We talk more nonsense about science than would fill many volumes: because, though we devote so much time to the pursuit of knowledge, nevertheless the amount of knowledge actually acquired, beyond all possibility of contradiction, is ludicrously small as compared with the energy expended in the pursuit of it, and the noise made over its attainment. Science lays many eggs, but few are hatched. Science boasts much, but accomplishes little; is vainglorious, puffed up, and uncharitable; desires to be considered the root of all civilization, and the seed of all good, whereas it is the heart that civilises, and never the head."

Paul Petoff, p. 117

By F. MARION CRAWFORD.

Tuebrook, May 7th, 1894.

Dear Sir,—I thought I would get the pamphlet on the "Good Friday fraud" before writing. I have now read and re-read the same, and think the various authors are right.

I should much like to know what Mr. Dimpleby said when you presented the matter to him. Did he seem to think there was anything in it; or try to shew you were wrong? Can you let me know?

Am sorry you intend to give up the editorship of the "E. R." I hope you will not do so until you have found another equally capable.

Am much pleased that a man of Dr. Schepfer's standing and ability should attack the twirling mass. Shall be glad to read the next article.

Yours faithfully,

WM. BATHGATE.

[Mr. D. failed to present any proof of the earth's sphericity; and when the flaw in his "Good Friday" chronology was insisted on, he offered the objector his professor's "gown"! But as the latter had already discarded one gown, he told Mr. D. he did not want another. He only wanted error rectifying, and truth proclaiming. Ed.]

Portsmouth, May 27th 1894.

Dear "Zetetes,"—I thank you for loan of the little book containing your Blackburn discussion of ten years ago. I return it herewith. I have read it with great interest, with the interesting Newspaper letters. I am pleased with the May No. of E.R., in which you have given a prominent place to your Lecture here. I like the letter signed R.I.P., also Lady Blount's Spontaneous and Hypothetical Poem. I regret to hear a possibility of your resigning the Editorship; it is no doubt a tax upon your time and your present weak condition. The conflict between error and Truth, whether Scientific or Theological, always requires some sacrifice. Your advice to us here is in season, but I fear we shall not do much. I shall endeavour to revive the subject later on. I only wish I could do more to keep the little Bark afloat. I hope your health will soon be better. You were not well when you were here. I know the burden of the "Olive Branches," especially when there are so many. Persevere in the Natural living. I am certain the "Diet Cure" is the only path to health.

Yours faithfully,  
G. T. BOLT.

Belfast, June 8th 1894.

Dear "Zetetes,"—Two Lectures by Mr. Atkinson came off on 25th and 26th April, in the Arthur Hall, Arthur Square, Belfast. The Hall was kindly lent by the owner for the occasion, and Mr. Ashe, a gentleman who has lately seen the truth, presided. There were about 100 persons present, and a good deal of interest shown. Mr. Atkinson went into the subject very fully, and took great pains to make all understand the subject. The Diagrams prepared were numerous and well got up. . . . Mr. Atkinson handled the subject in a masterly way, proving by natural facts, common sense, and the Scriptures, that we are living on a flat and stationary Earth, established and fixed, so that it "cannot be moved." Some questions were put, and briefly answered. Those interested are thinking of having a night for special enquiry. I thought you would like to have this report for the encouragement of others.

Yours sincerely,  
H. CLARKE.



CAUSES OF EXTINCTION.

(THE FLOOD?)

"It is impossible to reflect on the changed state of the American continent without the deepest astonishment. Formerly it must have swarmed with great monsters: now we find mere pigmies, compared with the antecedent, allied races. If Buffon had known of the gigantic sloth and armadillo-like animals, and of the lost Pachydermata, he might have said with a greater semblance of truth that the creative force in America had lost its power, rather than that it had never possessed great vigour. The greater number, if not all, of these extinct quadrupeds lived at a late period, and were the contemporaries of most of the existing sea-shells. Since they lived no very great change in the form of the land can have taken place. What, then, has exterminated so many species and whole genera? The mind at first is irresistibly hurried into the belief of some great catastrophe; but thus to destroy animals, both large and small, in Southern Patagonia, in Brazil, on the Cordillera of Peru, in North America up to Behring's Straits, we must shake the entire framework of the globe. . . . It appears from the character of the fossils in Europe, Asia, Australia, and in North and South America, that those conditions which favour the life of the

larger quadrupeds were lately co-extensive with the world; what those conditions were, no one has yet conjectured. It could hardly have been a change of temperature, which at about the same time destroyed the inhabitants of the tropical temperature, and arctic latitudes on both sides of the globe. . . . I have seen, in the Cordillera of the Andes, the evident marks where stupendous mountains have been broken into pieces like so much thin crust, and the strata thrown on their vertical edges; but never did any scene, like these streams of stones, so forcibly convey to my mind the idea of a convulsion, of which in historical records we might in vain seek for any counterpart (The Flood?) yet the progress of knowledge will probably some day give a simple explanation of this phenomenon, as it already has of the so long-thought inexplicable transportal of the erratic boulders, which are strewed over the plains of Europe." . . . Darwin's Journal, on H. M. S. "Beagle."

CLIMATE AND PRODUCTIONS.

(SOUTH LATITUDES COMPARED WITH NORTHERN.)

"On the West coast, (Tierra Del Fuego) however, the wigwams are rather better, for they are covered with seal-skins. We were detained here several days by the bad weather. The climate is certainly wretched; the summer solstice was now passed, yet every day snow fell upon the hills, and in the valleys there was rain, accompanied by sleet. The thermometer generally stood about 45°, but at night fell to 38° or 40°. From the damp and boisterous state of the atmosphere, not cheered by a gleam of sunshine, one fancied the climate even worse than it really was." . . .

On the climate and productions of Tierra del Fuego and the South-west Coast, Darwin says;—"The following tables gives the mean temperature of Tierra del Fuego, the Falkland Islands, and for comparison, that of Dublin":—

	Latitude	Summer temp.	Winter temp.	Mean of Summer and Winter.
Tierra del Fuego	53°38' S.	50°	33°.08'	41°.54'
Falkland Islands	51°30' S.	51°	—	—
Dublin	53°21' N.	59°54'	39°2'	49°37'

Hence, we see that the central part of Tierra del Fuego is colder in winter, and no less than 9½° less hot in summer, than Dublin. According to Von Buch the mean temperature of July (not the hottest month in the year) at Saltenfiord in Norway, is as high at 57°.8, and this place is actually 13° nearer the pole than Port Famine! Inhospitable as this climate appears to our feelings, evergreen trees flourish luxuriantly under it.



On the height of the snow-line and on the descent of the Glaciers in South America, says Darwin;—"For the detailed authorities for the following table, I must refer to the former edition.

Latitude	Height in feet of snow-line.	Observe.
Equatorial region; mean result	15,748	Humbolt, Pentland.
Bolivia, lat. 16° to 18° S.	17,000	
Central Chile, lat. 33° S.	14,500 to 15,000	Gillies and the Author.
Chiloe, lat. 41° to 43° S.	6,000	Officers of the Beagle, and the Author.
Tierra del Fuego, 54° S.	3,500 to 4,000	King.

"As to the height of the plane of perpetual snow seems chiefly to be determined by the extreme heat of the summer, rather than by the mean temperature of the year we ought not to be surprised at its descent in the straight of Magellan, where the summer is so cool, to only 3,500 or 4,000 feet above the level of the sea; although in Norway we must travel to between lat. 67° and 70° N, that is, about 14° nearer the pole to meet with perpetual snow at this low level. The difference in height, namely, about 9,000 ft. between the snow line on the Cordillera behind Chiloe (with its highest points ranging from only 5,600 to 7,500 ft.) and in central Chile (a distance of only 9° of latitude), is truly wonderful.

The descent of glaciers to the sea must, I conceive, mainly depend (subject of course to a proper supply of snow in the upper region) on the lowness of the line of perpetual snow on steep mountains near the coast. As the snow-line is so low in Tierra del Fuego, we might have expected that many of the glaciers would have reached the sea. Nevertheless I was astonished when I first saw a range, only from 3,000 to 4,000 ft. in height, in the latitude of Cumberland, with every valley filled with streams of ice descending to the sea-coast. Almost every arm of the sea which penetrates to the interior higher chain, not only in Tierra del Fuego but on the coast for 650 miles northwards is terminated by "tremendous and astonishing glaciers," as described by one of the officers on the survey. Great masses of ice frequently fall from these icy cliffs, and the crash reverberates like the broadside of a man-of-war through the lonely channels. These falls as noticed in the last chapter produce great waves which break on the adjoining coasts. It is known that the earthquakes frequently cause masses of earth to fall from sea cliffs: how terrific then would be the effect of a severe shock (and such occur here) on a body like a glacier already in motion and traversed by fissures! I can readily believe that the water would be fairly beaten back out of the deepest channel and then returning with an overwhelming force would whirl about huge masses of rock like so much chaff. In Eyre's Sound in the latitude of Paris there are immense glaciers, and yet the loftiest neighbouring mountain is only 6,200 feet

high. In this Sound about fifty icebergs were seen at one time floating outwards and one of them must have been at least 168 ft. in total height. Some of the icebergs were loaded with blocks of no inconsiderable size of granite and other rocks different from the clay-state of the surrounding mountains. The glacier furthest from the Pole, surveyed during the voyages of the *Adventure* and "Beagle" is in lat. 46° 50' in the Gulf of Penas. It is fifteen miles long and in one part seven broad and descends to the sea-coast. But even a few miles northward of this glacier, in the Laguna de san Rafael some Spanish Missionaries encountered "many icebergs, some great, some small, and others middle-sized" in a narrow arm of the sea on the 22nd of the month corresponding with our June, and in a latitude corresponding with that of the Lake of Geneva!

In Europe, the most southern glacier which comes down to the sea is met with, according to Von Buch on the coast of Norway, in lat. 67°. Now this is more than 20° of latitude or 1,230 miles nearer the pole than the Laguna de san Rafael."—*Darwin's Journal, on H. M. S. "Beagle."*

#### CLIMATE AND PRODUCTIONS OF THE ANTARCTIC ISLANDS.

"Considering the rankness of vegetation in Tierra del Fuego, and on the coast northward of it, the condition of the islands south and south-west of America is truly surprising. Sandwich island in the latitude of the north part of Scotland, was found by Cook, during the hottest month of the year, "covered many fathoms thick with everlasting snow;" and there seems to be scarcely any vegetation. Georgia, an island ninety-six miles long and ten broad, in the latitude of Yorkshire, "in the very height of summer, is in a manner wholly covered with frozen snow." It can boast only of moss, some tufts of grass, and wild burnet: it has only one land-bird (anthus correndera) yet Iceland, which is 10° nearer the pole, has according to Mackenzie, fifteen land-birds. The South Shetland Islands, in the same latitude as the southern half of Norway, possesses only some lichens, moss, and a little grass; Lieutenant Kendall found the bay, in which he was at anchor, beginning to freeze at a period corresponding with our 8th of September. The soil here consists of ice and volcanic ashes interstratified; and at a little depth beneath the surface it must remain perpetually congealed."

RECAPITULATION. "I will recapitulate the principal facts with regard to the climate, ice action, and organic productions of the southern hemisphere transposing the places in imagination of Europe, with which we are so much better acquainted. Then, near Lisbon, the commonest sea shells, namely, three species of *Oliva*, a *Voluta* and *Terebra* would have a tropical character. In the southern provinces of France, magnificent forests entwined by arborescent grasses and with the trees loaded with



parasitical plants, would hide the face of the land. The puma and the jagua would hunt the Pyrenees. In the latitude of Mont Blanc, but on an island as far westward as central North America, tree-ferns and parasitical Orchideæ would thrive amidst the thick woods. Even as far north as central Denmark, humming birds would be seen fluttering about delicate flowers, and parrots feeding amidst the evergreen woods; and in the sea there, we should have a *Voluta*, and all the shells of large size and vigorous growth. Nevertheless, on some islands only 360 miles northward of our new Cape Horn in Denmark, a carcass buried in the soil (or if washed into shallow sea, and covered up with mud) would be perpetually frozen. If some bold navigator attempted to penetrate northward of these islands, he would run a thousand dangers amid gigantic icebergs, on some of which he would see great blocks of rock borne far away from their original site. Another island of large size in the latitude of southern Scotland, but twice as far to the west, would be "almost wholly covered with everlasting snow," and would have each bay terminated by ice-cliffs, whence great masses would be yearly detached; this island would boast only a little moss, grass, and burnet, and a tit-lark would be its only land inhabitant. From our new Cape Horn in Denmark, a chain of mountains scarcely half the height of the Alps would run in a straight line due southward; and on its western flank, every deep creek of the sea, or fiord, would end in "bold and astonishing glaciers." These lonely channels would frequently reverberate with the fall of ice, and so often would great waves rush along their coasts; numerous ice-bergs, some as tall as cathedrals, and occasionally loaded with "no inconsiderable blocks of rock," would be stranded on the outlying islets; at intervals a violent earthquake would shoot prodigious masses of ice into the water below. Lastly, some Missionaries attempting to penetrate a long arm of the sea, would behold the not lofty surrounding mountains, sending down their many grand icy streams to the sea-coast, and their progress in the boat would be checked by the innumerable floating ice-bergs, some small and some great; and this would have occurred on our 22nd of June, and where the lake of Geneva is now spread out!"—*From Darwin's Journal, on H.M.S. "Beagle," voyage round the World.*

### "REFRACTION" EXTRAORDINARY.

BY WILLIAM BATHGATE, M.B.C.A.

On 10th of May, 1596, William Barents, a Dutchman, started from Amsterdam as chief pilot of two ships that had been fitted out to explore the Arctic Sea and discover, if possible, a north-east passage to China. This was his third voyage, as he had previously commanded two expeditions on a similar errand.

By November they had reached Nova Zembla, a large island off the North-east of Russia; but were unable to proceed further in consequence of the ice. They erected a large, wooden hut and prepared to pass the long and dark Arctic Winter as comfortably as possible.

On January 22nd of the following year, some of the sailors when away from the hut perceived signs of daylight and concluded that soon the sun would cheer them again; but Barents told them that it was yet more than two weeks too soon to see the sun from the island of Nova Zembla. On 24th January, it being clear weather, three of the sailors went to the sea-side on the north of the island and saw the upper edge of the sun which had not been visible since the third of November.

On seeing it they went speedily back to tell Barents and the rest of their companions the joyful news. "But William Barents," says the writer of the account, "being a wise and well-experienced pilot, would not believe it, esteeming it to be about fourteen daies too soone for the sunne to shine in that part of the world; but we earnestly affirmed the contrary and said we had seene the sunne," (whereupon divers wagers were laid).

"Upon the twenty-seven day it was cleare and bright weather, and then we all saw the sun in his full roundnesse above the horizon, whereby it manifestly appeared that we had seene it upon the twenty-foure day of Januarie. And as we were of divers opinions touching the same, and that one said it was cleane contrary to the opinions of all olde and new writers, *yea, and contrary to the nature and roundness both of heaven and earth*; some of us said that seeing in long time there had been no day, it might be we had overslept ourselves, whereof we were better assured: but concerning the thing in itself, seeing God is wonderfull in all his works, we will refer that to His Almighty power, and leave it unto others to dispute."

After making various calculations and consulting as to the positions of the stars, etc. they proved they had not missed a day; and then the account continues;—"Which we striving and contending about amongst ourselves, we could not be satisfied: but were wondered thereat; and some were of opinion that we had mistaken ourselves, which, nevertheless we could not be persuaded unto, for that every day without fail we noted what had past, and also used our clock, for on 26 Januarie it was faire, cleare weather, but on the horizon there hung a fog-bank or dark cloude, whereby we could not see the sun and our companions mocked us; but we were resolute in our former affirmation that we had seene the sunne: but not in his full roundnesse; but it fell out that one of our men got out and sawe the sunne and called us all out, wherewith we all went forth and saw the sunne in his full roundness a little above the horizon, and then it was without doubt

that we had seene the sunne upon the 24 of Janarie which made us all glad, and we gave God hearty thanks for His grace shewed unto us, that that glorious light appeared unto us again."

According to the ordinary calculations, the sun should not have appeared until the 9th February. Its upper edge should have been  $4^{\circ} 26'$  below the horizon! General refraction not being more than  $34'$ . For fourteen days after, the refraction gradually grew less.

After the return to Holland, the phenomenon caused the greatest surprise, and gave rise to much controversy among the learned men of the day. The opinion generally was that it was "opposed to nature and reason."

### Inconsistency of Limitless Space.

A rational conception of the physical or organic form of the universe cannot be entertained in any logical mind consistent with any idea of the earth as a rotating globe. That which destroys conception of the centre and circumference of the universe also destroys the idea of its form—the assumption that space is eternal and illimitable prevents any conclusion that the cosmos or world of existence, has any centre, for how could a *centre* be conceived in a universe whose circumference (!) is *infinite space*! The principles of modern astronomy are thus suicidal—the hypothesis demands the action of tangential and centripetal forces to hold worlds in position—and this "law" of the two potential forces, logically analysed, refutes the system and destroys its claims. If one sphere acquires the actions of these two forces upon it, there is no logic which does not lead to the conclusion that all spheres require them—it demands that the moon revolve around the earth, the earth around the sun, the sun around a larger and another sun, and that, in turn, another, and so on *ad infinitum* with an eternity of geometrical progression, through a universe without a centre, without form, and consequently without *existence*, for how can there be existence without the two essential factors of form—centre and circumference? But the idea of boundless space is a product of the astronomer's mind—he reaches this conclusion by assuming the convexity of the earth's surface, and thus loses himself, his science, and his reason in a whirling mass of worlds in a fathomless abyss of space—and agnosticism!—*Herald of Glad Tidings (America)*

### The Peacock's Tail.

The peacock's tail is one of those phenomena which provokingly expand in the face of the extreme evolutionist, spreading insoluble difficulties in his way. Darwin confessed that he could not account for this magnificent appendage to the plumage of a very silly bird. Natural selection and the survival of the fittest seem to be baffled here. The poor peacock flouts his wonderful fan before us, and the complacent science of the day is speechless in front of it. Some of us are not likely to be pronounced or advanced evolutionists until the peacock is persuaded to tell us how he managed to develop this resplendent and iridescent collection of feathered rainbows. We are asked to believe that he did it to please female vanity. But though there is such a quality as female vanity everywhere potentially working, the females usually apply it to their own side rather than the other. This is really too much! The peahen must be the most prodigious admirer of masculine finery in the universe, and must be gifted with an unspeakable, inordinate appetite for the artistic. The perversity of the peacock is proverbial; but to the poor evolutionist, this gorgeous fowl, parading in all Solomon's glory, but without any wisdom at all, is shamefully unfair. Just to indulge the faculty for admiration in the other sex, he struts to and fro in a costume which defies all the pretty fancies of hypothetical assumption.—*Christian Commonwealth*.

## THE EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



"Parallax" Experimentally Proving Water to be Horizontal.

NO. I (NEW SERIES).

SEPTEMBER, 1894.

PRICE 2D.

### UNDER NEW MANAGEMENT.

We are sure that our readers will be sorry to learn that our late Editor (Zetetes) Mr. Albert Smith; who has done such valiant service to the cause of truth; has been, owing to continued illhealth, obliged to give up the Editorial Work of our Magazine. We know that Mr. Smith is one of those men who lead a very busy life, and we fear that he has laboured in this, and other causes, with a zeal far beyond his physical strength. Since the launching of this herald of truth, he has borne a large share in the battle against scientific infidelity and error. We should have liked him to have been able to continue, but feel it better to lose him partially than altogether. We are thankful to know that as health and time permit, he will write for us, and this I am sure we look forward to with great pleasure. We feel certain that his abilities have been appreciated, and we trust that he will long be spared to us, that we may yet have much enjoyment and instruction from his able pen.

"Under New Management" does not necessarily mean under better management, although we shall do our best to make the journal merit the same good character it has always had. Let us go forward against the popular errors of the day, and expose them to the light. Let the reason and common-sense God has given to us be used aright. We do not complain of men having theories, but we do disagree with them for palming their theories off as absolute truth. They may have their theories if they like, but let them label them as such. Locke has well said:—"Truth, whether in or out of fashion, is the measure of knowledge and the business of the understanding; whatsoever is beside that is nothing but ignorance or something worse. To know many things and know them *all wrong* is not knowledge, or sense, or science."

that we had seen the sunne upon the 24 of Janarie which made us all glad, and we gave God hearty thanks for His grace shewed unto us, that that glorious light appeared unto us again."

According to the ordinary calculations, the sun should not have appeared until the 9th February. Its upper edge should have been  $4^{\circ} 26'$  below the horizon! General refraction not being more than  $34'$ . For fourteen days after, the refraction gradually grew less.

After the return to Holland, the phenomenon caused the greatest surprise, and gave rise to much controversy among the learned men of the day. The opinion generally was that it was "opposed to nature and reason."

### Inconsistency of Limitless Space.

A rational conception of the physical or organic form of the universe cannot be entertained in any logical mind consistent with any idea of the earth as a rotating globe. That which destroys conception of the centre and circumference of the universe also destroys the idea of its form—the assumption that space is eternal and illimitable prevents any conclusion that the cosmos or world of existence, has any centre, for how could a *centre* be conceived in a universe whose circumference (!) is *infinite space*! The principles of modern astronomy are thus suicidal—the hypothesis demands the action of tangential and centripetal forces to hold worlds in position—and this "law" of the two potential forces, logically analysed, refutes the system and destroys its claims. If one sphere acquires the actions of these two forces upon it, there is no logic which does not lead to the conclusion that all spheres require them—it demands that the moon revolve around the earth, the earth around the sun, the sun around a larger and another sun, and that, in turn, another, and so on *ad infinitum* with an eternity of geometrical progression, through a universe without a centre, without form, and consequently without *existence*, for how can there be existence without the two essential factors of form—centre and circumference? But the idea of boundless space is a product of the astronomer's mind—he reaches this conclusion by assuming the convexity of the earth's surface, and thus loses himself, his science, and his reason in a whirling mass of worlds in a fathomless abyss of space—and agnosticism!—*Herald of Glad Tidings (America)*

### The Peacock's Tail.

The peacock's tail is one of those phenomena which provokingly expand in the face of the extreme evolutionist, spreading insoluble difficulties in his way. Darwin confessed that he could not account for this magnificent appendage to the plumage of a very silly bird. Natural selection and the survival of the fittest seem to be baffled here. The poor peacock flouts his wonderful fan before us, and the complacent science of the day is speechless in front of it. Some of us are not likely to be pronounced or advanced evolutionists until the peacock is persuaded to tell us how he managed to develop this resplendent and iridescent collection of feathered rainbows. We are asked to believe that he did it to please female vanity. But though there is such a quality as female vanity everywhere potentially working, the females usually apply it to their own side rather than the other. This is really too much! The peahen must be the most prodigious admirer of masculine finery in the universe, and must be gifted with an unspeakable, inordinate appetite for the artistic. The perversity of the peacock is proverbial; but to the poor evolutionist, this gorgeous fowl, parading in all Solomon's glory, but without any wisdom at all, is shamefully unfair. Just to indulge the faculty for admiration in the other sex, he struts to and fro in a costume which defies all the pretty fancies of hypothetical assumption.—*Christian Commonwealth.*

## THE EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



"Parallax" Experimentally Proving Water to be Horizontal.

NO. I (NEW SERIES).

SEPTEMBER, 1894.

PRICE 2D.

### UNDER NEW MANAGEMENT.

We are sure that our readers will be sorry to learn that our late Editor (Zetetes) Mr. Albert Smith; who has done such valiant service to the cause of truth; has been, owing to continued illhealth, obliged to give up the Editorial Work of our Magazine. We know that Mr. Smith is one of those men who lead a very busy life, and we fear that he has laboured in this, and other causes, with a zeal far beyond his physical strength. Since the launching of this herald of truth, he has borne a large share in the battle against scientific infidelity and error. We should have liked him to have been able to continue, but feel it better to lose him partially than altogether. We are thankful to know that as health and time permit, he will write for us, and this I am sure we look forward to with great pleasure. We feel certain that his abilities have been appreciated, and we trust that he will long be spared to us, that we may yet have much enjoyment and instruction from his able pen.

"Under New Management" does not necessarily mean under better management, although we shall do our best to make the journal merit the same good character it has always had. Let us go forward against the popular errors of the day, and expose them to the light. Let the reason and common-sense God has given to us be used aright. We do not complain of men having theories, but we do disagree with them for palming their theories off as absolute truth. They may have their theories if they like, but let them label them as such. Locke has well said:—"Truth, whether in or out of fashion, is the measure of knowledge and the business of the understanding; whatsoever is beside that is nothing but ignorance or something worse. To know many things and know them *all wrong* is not knowledge, or sense, or science."

Many of the things taught in our Schools. Lecture Halls and Churches, are absolutely untrue, and therefore are productive of evil results, the chief of which is the "making of the word of God of non-effect," or of no more value than "old wives fables!" This I trust we shall make plain as we go on, for we intend to speak in no uncertain manner as will be seen by our

#### PLAN OF CAMPAIGN.

- 1st.—To declare and support *practical facts*.
- 2nd.—To expose the errors of *every theoretical* (so called) science.
- 3rd.—To support, and by practical experiments, prove the truthfulness and literal accuracy of *every* scientific statement in the Scriptures of Truth.
- 4th.—To encourage and help enquirers.

We trust that this plan will commend itself to all truth seekers, and in conclusion we would add, that we hope *all* Zetetics, whether Members of the Society or not, will take a copy (more if they can afford it) of each issue to give away or lend to friends and so help to spread the truth, that the earth is a vast irregular Plane, stretched out upon, and standing in and out of the waters of the mighty deep, as Scripture, confirmed by practical facts and common-sense, declares beyond refutation.

## THE PRETENSIONS AND PRETENCES OF MODERN ASTRONOMY.

By James Naylor.

No. 1.\*

It is the pride and boast of Modern Astronomy, that, compared with the ancient systems, it has introduced order for confusion, simplicity for complexity, and placed a comprehension of the universe within the reach of all. And the boast is not without some *seeming* justification; for if the modern system as *ordinarily presented*, be compared with the epicycle systems of the past, the former appears to much greater advantage. Indeed, so much is this the case, that Sir John Herschel might well say in his "*Outlines of Astronomy*:" "We shall take for granted from the outset the Copernican system of the world, relying on the easy, obvious and natural explanation it affords of all the phenomena as they come to be described." Now we are not concerned with a defence of the systems with which modern astronomy is contrasted, except in so far as they teach a plane earth, with the heavenly bodies in subordination to it. We are, however, concerned to show that, in spite of plausible

\* The italicised words in the quotations are ours; large capitals stand for italics in the originals.

appearances to the contrary, modern astronomy, both in its *primaries* and secondaries, is the most complex and confusing system ever palmed upon human credulity. This is a strong statement, but we propose in this, and some following papers, to thoroughly justify it; and also to show, that if any will but put astronomical claims to an impartial investigation, they will inevitably conclude that these claims are but a confused jumble of unproven, contradictory, and self-destructive assumptions, that are utterly unworthy of acceptance in the name of truth. The scope of our labour is tersely expressed by our title, "The pretensions and pretences of modern astronomy," which also conveniently divides those labours into two parts, and gives to the "pretentious," a priority in the order of examination; these latter, however, need not occupy us long, for have they not been graphically portrayed by the great Sir John Herschel himself? Here are his words: "The earth on which we stand and which has served for ages as the unshaken foundation of the firmest structures, either of art or nature, is divested by the astronomer of its attribute of fixity, and conceived by him as turning swiftly on its centre, and at the same time moving onward through space with great rapidity. The sun and the moon . . . become enlarged *in his imagination* into vast globes . . . The planets . . . are to him spacious, elaborate and habitable worlds . . . The stars . . . are to him suns of various and transcendent glory, effulgent centres of life and light to myriads of unseen worlds, so that when after dilating his thoughts to comprehend the grandeur of those ideas his calculations have called up, and exhausting his imagination and the powers of his language to devise similes and metaphors, illustrative of the immensity of the scale upon which *his universe* is constructed, he shrinks back to his native sphere, he finds it in comparison a mere point, so lost . . . as to be invisible and unsuspected from some of its principal and remoter members."

It would be difficult for anyone to surpass language like the foregoing, in either the extent of its *pretensions* or the graphicness of its diction. We will not, therefore, attempt it, but simply content ourselves by stating more formally the claims here asserted:

- 1st.—The Earth, which naturally appears to us as the largest and most beautiful object with which we are acquainted, is viewed by the astronomer as a mere speck of the universe and so utterly insignificant as to be unsuspected either by some of its principal or remoter members.
- 2nd.—Of the Earth's motions of both rotation, and of translation through space are asserted, though its seemingly fixed and immovable character are amongst our earliest and most persistent impressions.
- 3rd.—The sun, moon and planets in astronomy become vast globes,

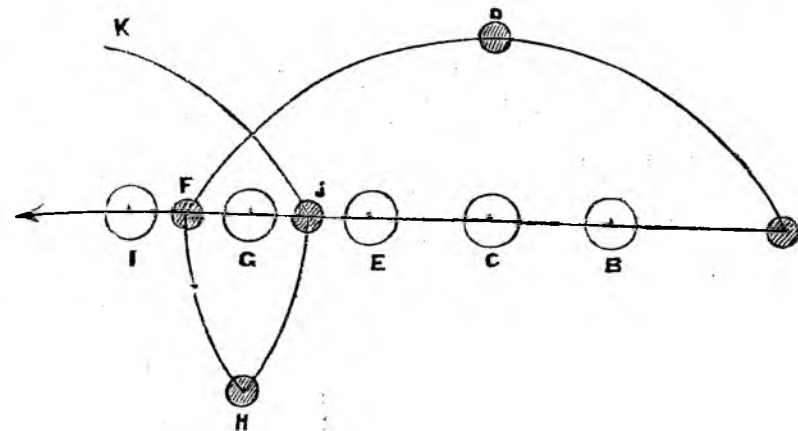
some of which are elaborate and habitable worlds, though to the ordinary mind the two former appear but as centres of light or of heat, and the latter but as a variety of the objects with which the heavens appear studded.

4th.—The stars, which from our earliest recollections have appeared to us as tiny, but withal, beautiful specks are enlarged by the astronomer into resplendent centres of systems; in many cases vaster than the solar one, of which the Earth is asserted to be a member.

5th.—The Universe is of such immensity that it embraces myriads of unseen worlds, where existence is only asserted, or assumed, but not attempted to be proved, even by the astronomer.

But why continue? Let it suffice that astronomy is not content with merely destroying our earliest, most cherished, and assertive observations and impressions, but must also substitute for them ideas of the Universe which appear—both as to time and space—so absolutely boundless as to exhaust the language, impoverish the similes, and render nugatory the metaphors, even of the astronomer! Surely a system with such *pretensions* as these should at least agree with itself, and its various parts should mutually sustain each other. We will now show that this is not the case by proving that these far-reaching *pretensions* are but *pretences* of a most *shameful* character.

It is a fundamental axiom of modern astronomy, that, the planets, with which the Earth is also included, revolve round the sun in elliptical orbits. Now this statement we characterize as a pretence of the most unblushing kind, and the term we use is correctly applied, whether it has reference to the actual statements, or to the pictorial representations. Take the Earth for instance, with whose alleged form of orbit by pictorial illustration we are familiar. There is generally shown a beautifully formed ellipse, with the sun occupying one of the foci, and the earth represented in four different positions to illustrate the four seasons of the year. Now this picture is entirely a false representation of the assumed conditions, for while the earth is making one of its alleged revolutions round the sun, the latter with all the so-called members of the solar system is also alleged to be making rapid rectilinear motions in space. The form, therefore, of the asserted orbit that would thus be described by the earth, or any of the planets, would have no more to do with an ellipse than with any other space enclosing figure. This will be well illustrated by the following diagram.



Let A be the position of the earth—say upon the 20th of September—and B the sun's place at the same date. Now if we suppose that the latter moves from B to C from the 20th of September to 21st of December, then the earth will have performed one-fourth of its asserted revolution round the sun, and will have moved from A to D at right angles, or in quadrature to its former position. On the 21st of March the sun will have moved to E and the earth to F. Then on the 20th of June the former will have moved to G and the latter to H; while lastly, on the following 20th of September, the earth and the sun will occupy the same relative positions as they did a year previously; their position in space only being altered, respectively indicated by I and J. The line A D F H J K represent, therefore, the actual path that would be described in space by the earth during about one year and a quarter, and it requires but the merest glance to see that such a path has no likeness whatever to an ellipse, nor indeed to any other figure enclosing a space.

But if the path described is not an ellipse, nor indeed anything analogous to it, what becomes of the statement that the planets revolve in elliptical orbits, a statement which is the essence of Kepler's first law? Why, evidently, it can only be looked upon as a stupendous pretence, and this all the more when compared with the scientific "Jubilate Deo" that has been sung over the discovery of this so-called "law."

With what elaboration and emphasis astronomers have brought into relief the circumstance that the epicycles and deferents of Ptolemy were totally inadequate to account for the peculiarities of the planetary motions; and that the circular paths, asserted by Copernicus, were also equally insufficient; and then with these they have contrasted the 20 year's labour of Kepler upon the motions of Mars, resulting in his enun-

ciation of the elliptical hypothesis, which, we are told, completely and satisfactorily accounts for all the phenomena. And yet, after all this noise and peans of joy, it is seen that—by the data of the astronomers themselves—the planets do *not* revolve in ellipses, but in a path which it would be difficult to describe as either scientific fish, flesh, fowl, or even a good red herring.

But the assertion of orbital ellipticity is not the only one in Kepler's first law, for it also insists that the sun occupies one of the foci of the ellipses in which the planets revolve. If, however, we look again at the diagram, we shall look in vain, for either that foci or any other.

There can be no occupation of either a foci, or a centre, by a body describing a continuous rectilinear path; and so far as asserted up to the present, this is precisely the path which the sun pursues. But if the sun cannot thus stand in the foci of the planetary ellipses, then another assertion of astronomers is seen to be a pretence, namely: that the sun is the centre of the solar system. We are all familiar with what persistency this proposition has been set forth, and what a commotion was caused in the world by its first propagation. Its insistence covered Copernicus with contemporary obloquy, and nearly cost Galileo his life. Yet all this commotion has been for no purpose, for here in the 19th century, by simply taking the astronomer's own premisses, the sun is seen to be *not* the centre of anything, much less of the so-called solar system!

As being allied also with the foregoing, it may be well to enquire why the planets are said to revolve in orbits at all? The idea of the orbit is derived from the imaginary spheres, to which the ancients supposed the heavenly bodies were fastened and revolved with them. If then the planets moved round some fixed centre, or foci, the term orbit, could, with propriety, be applied to the relative path they would describe.

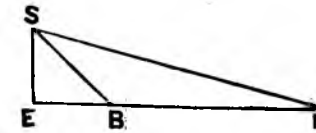
But the planets do *not* revolve round some fixed centre, but, according to the astronomer's own data, they simply move onward in an irregular path—similar to our diagram—instead of a rectilinear one, such as is pursued by the sun. The term orbit, therefore, cannot with any propriety, be applied to the course the planets are said to pursue, for it involves the idea of continuous motion in a *complete* and approximately *circular* path, whereas, the movement alleged is motion in an *incomplete, irregular* but approximately continuous *forward path*. Would it not be just as sensible, therefore, to put light for darkness, as to put one for the other of the two dissimilar ideas we have just contrasted, and we are thus compelled to designate the statement that the planets move in orbits as another astronomical pretence which has no justification even from astronomical data.

*To be continued in our next.*

## “DEDUCTIONS FROM THE THEORY OF A FLAT EARTH”

ANSWERED BY G. M.

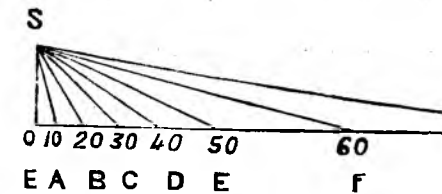
Figure I.



“E (Fig I.) a point upon the equator; B Bordeaux; S the sun; angle E B S sun's observed altitude; B E S is a right angle, hence angle E S B equals 45°, hence the sides E S, E B are equal because they subtend the equal angles at S and B.

Then if N were a point so near the 'North Pole' that the sun's observed altitude equalled one minute of a degree, the distance E N would be 3,450 times E B.”

Figure II.



“Now by the most elementary trigonometry, since angle at E (Fig. II.) is a right angle

$$\frac{A E}{S E} \text{ equals Cotangent of } 10^{\circ}$$

$$\frac{B E}{S E} \text{ equals Cotangent of } 20^{\circ}$$

and so on.

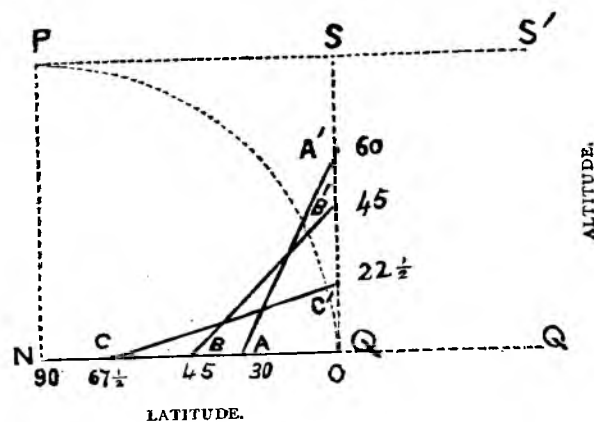
Therefore taking S E as unity, the comparative lengths E A, E B, E C, and so on may be got from a table of cotangents, thus—

Cot. 10°	equals	.1763
20°	„	.3639
23°, 30'	„	.4348 (tropic)
45°	„	1.0000
80°	„	5.6713
90°	„	Infinite

Hence the distance from the equator to the North Pole is infinite.”



Figure III.



The above is the title of a paper by C. Harpur, purporting to show the untenable nature of the Flat Earth Theory by reason of the inconsistency of its relative distances in latitude, as exhibited by Plane Trigonometry.

For instance, taking the latitude of Bordeaux as  $45^\circ$ , that would be midway between the equator and the Northern Centre upon the plane—or North Pole upon the sphere: but by a table of cotangents, the Northern Centre—instead of being calculated as twice the distance of Bordeaux from the equator, would appear to be 3,450 times that distance. See Fig. 1.

The author's ultimate conclusion is evidently either the "Flat Earth or the table of cotangents is wrong." That Mr. Harpur himself may be wrong in his method of applying the abstract truth in the mathematical tables to the particular case, as *another possible conclusion*, seems to have escaped his perception! We shall fairly reciprocate his courteous tone, if apart from any advocacy of the Plane Theory, we endeavour to impartially examine his argument (given above ED.). We omit all criticism of his Part 3 on the assumption that the effect of refraction upon observed altitudes would be the same for both theories—of sphere and plane. The gist of his argument is in connection with his Part II.

In determining latitude his astronomy is *not exact*, for he says—"the name 'latitude  $10^\circ$ ' is given by geographers to that part of the earth where they find by observation that the height of the pole-star is  $10^\circ$  and of the sun at noon at the equinox  $80^\circ$ ." He ought to know that no such spot is to be found, for the simple reason that the pole-stars declination is  $1^\circ 27'$  short of  $90^\circ$ , this involves a possible error of  $2^\circ 54'$  in latitude, a very serious matter if any mariner should happen to be not better informed, upon approaching a coast in foggy weather.

However, not to lay too much stress upon this point, we are told "that latitude  $20^\circ$  is where the pole-star is at  $20^\circ$  and the sun at  $70^\circ$ ." Therefore Fig. II. represents fairly the flat earth and the sun." See Fig. II. and abridged list of cotangents, and by the table he finds that "the distance from the equator to the North Pole is infinite." In Fig. II, "S E is taken as unity," but no reason is assigned; for the argument's sake we accept this; then the distance E A is taken to represent 10 degrees of latitude, the numerical value of which would be found by the ratio .1763 which as the *tangent* of  $10^\circ$  is the comparative length of E A to unity. The tangent of  $45^\circ$  equals unity, and had Fig. II. been drawn accurately, the distance  $0^\circ$  to  $45^\circ$  would have been shown by construction as equal to S E. Now, unity represents the sun's distance from the equator at the point E, which may be taken at the orthodox quantity—roundly 93 millions of miles, which multiplied by the ratio .1763 would give over 16 millions of miles for the distance E A representing  $10^\circ$  of latitude. The *contangent* of  $10^\circ$  is the ratio 5.6713 which means practically that the distance S E would be multiplied by something more than five-and-a-half times, thus giving over 526 millions of miles as the value of  $80^\circ$  of latitude. Not much wonder that our author trespasses upon infinity in search of his 'North Pole!' Such are the results of the attempted application of the trigonometrical ratios for finding the value of distances upon earth's surface, when taking the sun as an observing station. By the orthodox theory all lines from earth's surface to the sun are taken as *practically* parallel: this would apply, as concerning the sun's distance, to the plane equally with the sphere, because the diameter of the equator as a plane circle, may be taken as equal to the diameter of the equator upon a globe! Secondly, there is no necessary connexion between the sun's distance from earth and the extent of earth's surface; therefore there was no reason for taking S E as unity. But latitude being found as a deduction from the observed altitude of an object in the heavens, whose declination is known, it would follow thence that the lines A S, B S, C S, D S, &c., should be taken as unity for the various triangles A E S, B E S, C E S, &c., respectively: and S E would be the *sine* of the various angles E A S, E B S, E C S, &c., and as such, if trigonometry were at all applicable, would show the sun's distance vertically from earth. The distances E A, E B, E C, or B C, C D, &c., as representing latitude, would be base lines in the respective triangles, and of which, the value of one should be a known quantity, then for the others a little geometry and the simplest arithmetic would suffice. But the inapplicability of trigonometry will more clearly appear in connexion with the third consideration, *viz.*, the *utterly condemning fallacy involved in the supposition that all the lines from the points E A B C D E F upon earth's surface to the sun meet at the same point, S.* Now, the  $90^\circ$



by angular measure of latitude have to be projected upon the *radius* of a circle, upon the plane theory. Upon both theories, of sphere and plane, with the sun at equinox, as latitude increases, the sun's observed altitude decreases; the effect of this upon the spherical theory, would be to give all lines to the sun as absolutely *parallel*; but upon both theories whilst the sun is in the zenith of an observer at the equator, it is in the horizon of an observer at the North Pole, or Northern centre; so that the apparent displacement of the sun's position in the heavens is equal to the variation in latitude of the observer, and may equal one side of a square described upon the radius of the equator.

If N Q be the radius of a globular earth, P the North Pole, then the dotted arc P Q would be the  $90^\circ$  of North latitude; at equinox the sun vertical to the equator would be in the direction N Q Q', simultaneously it would be in the horizon of N, *i.e.*, in the direction P S S'; therefore, the sun's *apparent* position varies to the extent of one side of a square described upon the radius; or S Q is the extent of that variation, upon both sphere and plane, when the difference in the observing stations equals  $90^\circ$  latitude.

Therefore, the direction of the lines of observed altitudes do not meet at the same point, hence Mr. Harpur's statement that his "Fig. II. represents fairly the flat earth and the sun," places him in a dilemma; either, whilst posing as a would-be instructor, he evinces special ignorance; or as a prejudiced theorist, he wilfully misapplies known truths (dealing of course with what comes before us, and apart from any approach to personality).

The projection of latitude upon a plane earth presents no difficulty. We take the data admitted by Mr. Harpur as reasonable, *viz.*, "At noon, on March 20th, the sun as seen from the North Pole (or Northern centre) is just on the horizon. This being so, the height of the sun is  $0^\circ$ . At the same time its height as seen from Bordeaux is  $45^\circ$ ." (By Fig. I. Bordeaux is in latitude  $45^\circ$ .) Again, in Part II. "latitude ' $10^\circ$ ' is that part of the earth where, by observation, the height of the sun at noon at the equinox is  $80^\circ$ , similarly latitude  $20^\circ$  is where the sun is (by observation) at  $70^\circ$  (elevation).

In Fig. III. let N Q be a portion of the surface of a Plane Earth; N the Northern Centre to which the "pole of the heavens" is vertical, in the direction N P: Q a point upon the equator to which the sun at equinox is vertical in the direction Q S; then N Q is the radius of the equator, that imaginary circle which bisects the torrid zone. S, the sun, appears in the zenith of Q, in the direction Q S, but it would appear in the horizon of N, in the direction N Q. Hence the variation in the sun's observed altitude as measured upon arc would be  $90^\circ$ . Similarly P in the zenith of N would appear in the horizon of Q in the direction Q N.

The lines which make a right angle may be infinite, *i.e.*, greater than known; hence the lines Q S, Q N, which make the right angle S Q N—also the lines N P, N Q making the right angle P N Q may be infinite: but the distance N Q is limited by the *vertical direction* of the lines N P, Q S; for if N Q were produced at either extremity, then P would not be vertical to N, neither would S be vertical to Q. It will be obvious that the limitation of N Q does not affect the distances N P, Q S, for the vertical direction of these lines would be maintained, though infinitely produced.

Now Latitude—*i.e.* breadth, upon earth's surface, measured from the equator, North and South—is found as a deduction from the observed altitude of any object in the heavens whose declination is known; declination in the heavens corresponds to terrestrial latitude; thus latitude is connected with angular measure. But taking the simplest case, that of the sun at equinox, as the observer's latitude increased, the observed altitude would decrease, so that the latitude and observed altitude would be complementary, *i.e.* their sum would equal  $90^\circ$ . Therefore, as an object cannot have a greater elevation than  $90^\circ$  of arc, nor less than  $0^\circ$ , and as these values result upon observations at the stations Q and N: it follows that the  $90^\circ$  by angular measure of latitude would be projected upon the plane in simple arithmetical proportion of the quadrant of circumference to the radius.

And so reducing observations to construction, we have in Fig. III, if sun's observed altitude at equinox be  $60^\circ$  then the latitude would be  $30^\circ$ , which being  $\frac{1}{3}$  of  $90^\circ$  would be projected at the point A, Q A being  $\frac{1}{3}$  of the radius Q N, the sun's elevation being the angle Q A A'. If observer's altitude were  $45^\circ$ ,  $\frac{1}{2}$  right angle, latitude would equal  $45^\circ$  and be projected at the point B, Q B being half the radius Q N, sun's elevation the angle Q B B'. If observer's altitude were  $22\frac{1}{2}^\circ$ — $\frac{1}{4}$  of a right angle—then latitude would be  $67\frac{1}{2}^\circ$ , and be projected at the point C, Q C being  $\frac{3}{4}$  the radius Q N, sun's elevation, angle Q C C'. At N, the limit of north latitude, the sun's observed altitude would be  $0^\circ$ , it would appear in the direction N Q.

Again, attention may be directed to the inapplicability of plane trigonometry, because it is obvious we do not define the sun's actual position in the heavens by observation, but from its apparent position, we deduce the latitude.

If of interest to your readers, Mr. Editor, when you can allow the space it may be shown that the angles required for finding the latitude are the same for sphere and plane, and are applicable with equal facility upon both theories.

Mr. Harpur's paper is useful as showing how abstract mathematics may be misapplied. Yet he is not more greatly in error than the

Astronomers, who for finding the latitude, regard all lines from earth to the sun as "practically parallel" as the result of the sun's immense distance, but profess to find an angular value—the sun's parallax—when attempting to solve the question of that distance; the truth being, that if proceeding upon the spherical theory, then all lines of direction from earth's surface to the sun are absolutely parallel, the reason being of a simple geometrical nature; and to regard this parallelism as merely "*practical*," and as resulting from the enormous distance, is an evasion of the truth. If the Astronomers do not know this, then they are thereby convicted of ignorance in their special province; if they do know it, then why do they not fairly admit that they have *no positive data for the astronomic distances, magnitudes, or velocities?*

Zealous orthodoxists may find that the plane earth theory is not to be snuffed out of mind by the misapplication of mathematics, nor by counter theory which is founded upon pure assumption.

## THE GLACIAL NIGHTMARE AND THE FLOOD

"*A second appeal to common-sense from the extravagance of some recent Geology.*" By Sir H. H. Howorth, K.C.I.E., M.P., F.R.S., F.G.S

"One of the chief objects," says Sir H. H. Howorth, "of this book, is to show that the Glacial theory, as usually taught, is not sound: but that it ignores, and is at issue with, the laws which govern the movements of ice, while the geological phenomena to be explained refuse to be equated with it. This is partially acknowledged by the principal apostles of the ice theory. They admit that ice as we know it in the laboratory, or ice as we know it in glaciers, acts quite differently to the ice they postulate, and produces different effects; but we are bidden to put aside our puny experiments which can be tested, and turn from the glaciers which can be explored and examined, to the vast potentiality of ice in shape of portentous ice-sheets beyond the reach of empirical tests, and which we are told acted quite differently to ordinary ice. That is to say, they appeal from sublimary experiments to a *priori* argument drawn from a transcendental world. Assuredly this is a curious position for the champions of uniformity to occupy."

"I hold that the Glacial Theory, as ordinarily taught, is based, not upon induction, but upon hypotheses, some of which are incapable of verification, while others can be shown to be false, and it has all the infirmity of the science of the Middle Ages. This is why I have called it a Glacial Nightmare. Holding it to be false, I hold further that no theory of modern times has had a more disastrously mischievous effect upon the progress of Natural Science."

"I not only disbelieve in, but I utterly deny, the possibility of ice having moved over hundreds of miles of level country, such as we see in Poland and Russia, and the prairies of North America, and distributed the drift as we find it there. I further deny its capacity to mount long slopes, or to traverse uneven ground. I similarly deny to it the excavating and denuding power which has been attributed to it by those who claim it as the excavator of lakes and valleys, and I altogether question the legitimacy of arguments based upon a supposed physical capacity which cannot be tested by experiment, and which is entirely based upon hypothesis. This means that I utterly question the prime postulate of the glacial theory itself."

We notice that although Sir H. Howorth offers a "widespread flood" in place of the Glacial Theory, he ignores and repudiates the Universal Flood of Holy Writ, and considers it "propriety to leave the Biblical account alone." He quotes from Sedgwick's Paraphrase of Bacon, "the impossible task of equating science and faith." He says;—

"The Pleistocene Flood, though far from being universal, was certainly one of the most widespread catastrophes which the world has seen." "The breaking up of the earth's crust, of which the evidences seem to be overwhelming, necessarily caused great waves of translation to traverse wide continental areas, and these waves of translation as necessarily drowned the great beasts and their companions, including palaeolithic man, and covered them with continuous mantles of loam, clay, gravel and sand, as we find them drowned and covered."

We tell Sir H. Howorth and the whole world of scientists that there is another Nightmare for them to face, in which there is no more truth than there is in the "Glacial Nightmare!" That Nightmare is the Globular Nightmare of Sir Isaac Newton! The world; were it a sea-earth-globe, spinning with seven-fold motion through "space," never could have been flooded; no, not even to the extent required by the theory of Sir H. Howorth! Where did the water come from? Where did it go to? If the water came in the form of rain, how did it overcome the frictional resistance of the revolving atmosphere?

There is no theory extant that has had, and is having, so mischievous an effect upon Natural Science as the Globular Nightmare. It is the fundamental error of all errors in existence, hence the present system of "educating the masses" by "University Extension" schemes, tendeth but to make the nation a nation of rabid infidels.

The science of Geology is but the outcome of the Globular Nightmare, or, Sir H. Howorth could not have spoken of "the breaking up of the *crust of the earth*." It is sad to see those who once were ardent advocates of "a vast and *universal Flood*" cringing before the geological idol of supposition, and pleading on its behalf for "a greater latitude of interpretation of Scripture," or, "some modification," or, "a little concession on the part of literal interpreters." We remember that it is written in the Scriptures of Truth, "he that believeth not God, makes

Him a liar." Until Geology, Astronomy or Evolution, can produce some distinct and conclusive proof of truthfulness; and by consequence, unmistakable and irrefutable evidence against the Mosaic Cosmogony, we shall testify against their systematized theories as the vain janglings of so-called scientists.

"TAKE HEED WHAT YOU HEAR."

## THE BOASTED ACCURACY OF MODERN ASTRONOMY EXPOSED.

By Thos. Geo. Ferguson.

The Science of Theoretical Astronomy makes a boast of its accuracy, and as it is best to "prove all things" a few of their statements shall be put to the test to see if they have any right to the claims they make, viz:—"that Astronomy is the most exact of all sciences."

Sir Robt. Ball tells us in his *Story of the Heavens*, p. 510 (1893 Ed.):—"We can determine the place of a planet with such precision that it is certainly "not one second of arc wrong," and he goes on to explain that "a foot rule placed "at a distance of 40 miles subtends an angle of a second, and it is surely a delicate "achievement to measure the place of a planet, and feel confident that no error "greater than this can have intruded into our result."

The accuracy they vaunt so loud speedily disappears when the statements of two or three of the most "eminent astronomers" are compared with each other! For instance, if we start with the problem which nearly all modern astronomers agree is the most important throughout the whole range of astronomy, viz:—The sun's distance from the earth, we shall see what diversity of opinion (absolute contradictions—Ed.) exist amongst them, so much so, that hardly any two of them agree about it. The late Mr. Proctor stated it was 91,500,000 miles, but Sir R. Ball gives it as 92,700,000. Surely a difference of 1,200,000 miles is not the "precision" Sir R. Ball speaks of in his work from which I have quoted?

Again these distances differ very considerably from those given by other "eminent astronomers":—Copernicus gave it as 3,391,200 miles; Kepler, 12,376,800; Newton (1st guess) 28,000,000; Newton (2nd guess) 84,000,000; Herschel, 95,000,000; Gould, 96,000,000; Cassini, 112,000,000; Mayer, 184,000,000.

Mr. Proctor in the opening remarks of his book *The Sun*, says:—"The determination of the sun's distance is not only an important problem of general astronomy "but, it may be regarded as the VERY FOUNDATION OF ALL OUR RESEARCHES."

How very far from accuracy must that science be which has such an *uncertain foundation*? If modern astronomy depends upon the accuracy of the sun's distance from the earth, then we are justified in saying that it is built on a sandy foundation, for, as we have seen, the astronomer's theories about it, are against themselves.

Let us now glance at their theories about the planets, and I trust the reader will, from their own text books, compare the diameters and distances as given by the most "eminent astronomers." I shall only give one instance as a sample. Saturn's mean distance from the sun, as given in Sir R. Ball's *Story of the Heavens*, is 884,000,000 miles, and the diameter 71,000 miles. Prof. Lockyer gives its

distance as 880,000,000 miles; a difference of 4,000,000 miles. Prof. Olmsted gives Saturn's distance from the sun as 890,000,000 miles, and the diameter of Saturn as 79,000 miles. Others could be quoted equally at variance. Where, we ask, is the accuracy of this "most exact of sciences?"

No doubt some will say, "Well, how do the astronomers foretell the Eclipses. &c., so accurately?" This is done by cycles. The Chinese for thousands of years have been able to predict the various Solar and Lunar Eclipses, and do so now, in spite of their disbelief in the theories of Newton and Copernicus. Thomas Keith in his "Treatise on the use of the globes" says:—"The Cycle of the moon is said to have been discovered by Meton, an Athenian, B.C. 433," when, of course, the globular theory was not dreamt of. After a period of 18.6 years, the moon recommences precisely the same spiral path around the earth in relation to the sun, and so the Eclipse of the moon, which takes place on September 29th, will again occur in 18.6 years. We find in no other science (save perhaps Geology) such differences of opinion and such opposite statements existing amongst its professors, as among those of modern astronomy. Algebra, Arithmetic, Euclid or Geometry, may be called exact sciences, but certainly not modern theoretical astronomy.

That there are difficulties in connection with natural phenomena is not doubted, and that there are good men in the ranks who support these theories we do not deny, but we are prepared to show that at the outset assumption is called Fact, and consequently a multitude of errors have crept in which it is the duty of every lover of truth to warn people against and to expose. We may be thought to be fault finders, and had better be so-called than let falsehood reign and permeate society without an attempt to expose it. All we ask is that everything stated may be brought to the test of practical facts and common sense, then the truth will soon be evident. We have but very briefly touched this subject, but sufficient, we hope, to cause our readers to think, and to examine the matter for themselves.

## OUR OBSERVATORY.

"ERROR IS ALWAYS INCOHERENT."

### THE DAWN OF ASTRONOMY.

A Study of the Temple Worship and Mythology of the Ancient Egyptians. By J. NORMAN LOCKYER, F.R.S., &c.

"This book, ambitious in object and pretentious in style, seems to us to prove no more than that a distinguished astronomer may be wholly ignorant of the history of his own science, and that familiarity with the weights of the sun and stars do not necessarily imply the power to weigh evidence. Mr. Lockyer's acquaintance with the spectroscope does not enable him to know better than Homer what the ancients felt about the circumpolar stars, nor to contradict Archimedes on the question whether any one of old suspected the revolution of the earth round the sun. As it is wholly impossible within our limits to criticise a tenth part of Mr. Lockyer's arguments, we shall begin by calling attention to one or two of the assumptions—throughout presented by Mr. Lockyer, not as assumptions, but as ascertained facts—[shame, Ed.] on which pages and pages

of these arguments depend. With their exposure it seems to us that no small part of Mr. Lockyer's sandbuilt structure falls at once to the ground.

In the course of an attempt to show that an inscription, which attributes the laying of a foundation-stone to Augustus, really means that the stone was laid in 5000 B.C., Mr. Lockyer is obliged to construe a reference to the Great Bear as a reference to a particular star in the Great Bear—namely, *a* or Dubhe. This explanation rests entirely on the assumption that *a* is the brightest star in the Bear, which Mr. Lockyer more than once tells us in plain language is the case; while once, as if to prove his knowledge of the past as exhaustive as his acquaintance with the present, he speaks of “Dubhe, the chief star in the Great Bear in the time of the Ptolemies.” Who could suppose that in this pretentious phrase Mr. Lockyer was speaking purely at random? Yet such is the case. At present the unaided eye cannot detect in Dubhe any superiority to two at least of its fellows, while modern photometric estimates are equally blind to its pre-eminence. Does Mr. Lockyer's flourish about the Ptolemies mean that we have any reason to think the star was brighter of old? Not in the least: we have absolutely no evidence on the subject older than the catalogue of stars in the *Almagest*, and here the chief stars in the Bear are marked as equal.

A far more important assumption of Mr. Lockyer's is that he can tell what stars composed the Egyptian constellation of the Hippopotamus. He pretends to know its principal star, and gives us the date at which the group ceased to be circumpolar, though this, of course, can be known to no one who does not also know what were the precise limits of the constellation. Mr. Lockyer is as ignorant of this as the rest of the world, and does not even venture to offer any arguments in support of his opinion, except the statement that Brugsch and Parthey agree with him, and even this statement is not correct. Dr. Brugsch has indeed hazarded the guess that the Hippopotamus was the modern Dragon; but Mr. Lockyer, while repeatedly giving out this opinion as his own, is obliged, in the interests of his argument, to make the Hippopotamus answer only to a small part of that constellation, in fact to little more than the Dragon's head. Our space does not allow us to refute Mr. Lockyer's theory of the Hippopotamus, but we must point out that it is flagrantly inconsistent with another of his favourite doctrines. He assures us that the Egyptians made star-maps, and that one of them has come down to us in the shape of the famous “round zodiac” of Denderah. Now, if this curious planisphere, on which the star Sirius is represented by a good-sized cow, and the planets take up as much room as the zodiacal constellations, is to be accepted as a star-map, it follows that Mr. Lockyer's own theory of the Hippopotamus is wrong. The slightest study of the monument will show that, if it is to be taken seriously, the Hippopotamus was a

huge group, which can never at any time been wholly comprised within the narrow circumpolar heaven of Egypt.

Some of Mr. Lockyer's arguments rests on the belief that this Denderah zodiac, made, as every one now admits, in Roman times, is what Biot long ago *supposed* it to be, a faithful representation of the heavens in 700 B.C. This strange belief testifies, not indeed to his study of Biot, but only to his omission to study Biot's successors. It is enough to point out that the monument represents Mercury and Venus in positions which they can never have held, with regard to each other, since the creation of the world. Such, then, being the nature of the evidence on which Mr. Lockyer's theories rest, what are we to say of the theories themselves? The advantages of having a temple so constructed as to serve at the same time as a telescope, when the temples were orientated, as Mr. Lockyer says they were, to the rising and setting places of stars, are more apparent. We read of nocturnal services conducted in total darkness until the sanctuary was suddenly lit up by the radiance of a single star, rising behind the backs of the astonished worshippers opposite to the open door of the temple. It is surprising that the only evidence cited to show that so impressive a ceremony ever did—or could—take place, is a passage from Herodotus describing “the ceremonials and mysteries” of a temple not in Egypt, but at Tyre. But it is still more surprising to find that Mr. Lockyer has rested his whole case on a passage which *he has not verified*. (We should like to see *anything* that Mr. Lockyer *has ever verified* Ed.). For Herodotus says not a word about mysteries and ceremonials, and makes not the smallest allusion to anything wanting explanation, whether by stars or otherwise.

The telescope-temples were also built to observe the “cosmical” rising of stars, that is the rising of a star at the same instant with the sun, when, according to a belief until now universal, it is invisible. We need not inquire whether such a thing could be done. Mr. Lockyer's own evidence shows that it was *not* done. For many temples, according to him, were orientated to the star Spica, which being close to the ecliptic must, when rising or setting at the same time with the sun, have also risen or set almost in the same place with the sun. Mr. Lockyer himself would not contend that his darkened temples would show Spica or Regulus under these conditions; yet he tells us that all the temples are constructed on the same principle, and a construction which in some cases is certainly meaningless must be taken to be meaningless in all.

Is there then any reason to believe that Egyptian temples were ever orientated to stars? We are at least sure that Mr. Lockyer has not furnished any. It proves nothing that he has been able to draw up a list of temples directed to points of the horizon where this, that, or the other star has at some time risen or set. It results from the law of the precession of the equinoxes that all the stars are slowly altering their

distances from the equator, and therefore that their rising-places are slowly changing.

So far then as those many temples are concerned, the dates of which are wholly unknown to us, the fact that Mr. Lockyer can find stars to suit them does not afford the least presumption that they were built at the time when the stars were suitable. His theory can only be tested by those temples of which we do know the dates at least approximately. Now there are certainly a few cases where a temple would, about the time when we believe it to have been built, have had a star rising in line with its axis; and over these cases Mr. Lockyer is so jubilant that he confidently asserts the object of the temple's erection, and the condition of its use, to have been the admission of light from that very star. What then of those much more numerous cases where the temple appears to have been built at the time when there was no star to send its rising beams along the axis? (How can a star "send its *rising beams* along the axis," when it takes its light 3 years to reach the earth? Ed.). With amazing inconsistency Mr. Lockyer replies that such a temple is doubtless a restoration of some older one, built originally when some star did shine down it, although such a restoration must, on his own principles, have been absolutely useless. It seems never to strike him that, if this theory be right, then the other theory, that the direction is the essential part of the building, is wrong. Most amazing is this inconsistency in those very few cases, on which he so often insists, where he claims to find *proofs* that existing temples actually have been altered or rebuilt to follow a star. Mr. Lockyer, rashly following Mr. Penrose, contends that the Greeks, too, orientated temples to stars, and rebuilt them, even the Parthenon itself, to follow the stars in their movements. Of this Greek habit, therefore, the Greek astronomers were not aware. Stranger still, it appears from the silence of Vitruvius that the Greek architects were not aware of it either. It is scarcely probable that a secret so jealously kept should have been surprised by Mr. Lockyer. But if Mr. Lockyer's methods have led him, in the case of Greek temples, to a manifestly wrong conclusion, why should any one suppose that the same methods have guided him, in the case of Egyptian temples, to a right one? (We are reminded of the "methods" of the Professor to prove the world a globe. Hush! It was "a fly on an orange," Ed. E.R.)

From *The Guardian*, July 4th, 1894.

From SIR JOHN LUBBOCK'S *Beauties of Nature*.

Wherever ships have sailed southwards—except at a few places when land has been met with—they have come at last to a wall of ice, from 50 to 400 feet high.—p. 366.

The condition of the arctic region is quite different, there is much more land, and no such solid cap of ice.—p. 377.

### The Contents of Our Letter Box.

Dear Sir.—*All Past Time* will be ready in six weeks hence. The enclosed is a "proof" of a stereotyped page, in which I have alluded to you and given your address. I have since learned that Mr. Albert Smith has retired from the post of Editor.

The past twelve months have been a very successful period, in respect to astronomical chronology, and the new issue will contain much more information than I have previously published. All discoveries confirm Biblical history. A very fortunate discovery has been made by Mr. Pinches, the cuneiform reader at the British Museum. He finds among some hundreds of baked clay tablets, which came from Babylonia, one which gives all the Kings of Babylon from the beginning of the kingdom to its end. The number of years reigned by each monarch is given, and also how many years such dynasty lasted. The result is, the kingdom began about two years after the confusion of tongues at the Tower of Babel. The first King, Sumu-abi, reigned 15 years. He was probably a son of Nimrod. I have printed the whole of the tablet on the principle of A. M., years. Whatever differences exist between us, respecting the true system of astronomy—and I find some clever and pious men holding yours—we must all rejoice that the Bible is such an excellent and *precise* book. [Hear, hear, Ed.]

The *New Era at Hand* is doing well and is highly spoken of.

July 15th, 1894. J. B. DIMBLEBY.

[The books of Mr. Dimpleby we commend to the readers of these pages. They can be had from the Secretary. See list of publications.]

We regret that Mr. Dimpleby is not a pianist, and as this question is one of vital importance to him, in connexion with his system of chronology, we do most certainly consider that he is bound to look this subject fairly in the face and decide who is on the side of truth, with regard to the shape of the world. Our

love of truth leads us to here tell him that his system of chronology is marred by the pagan idea of a revolving globe before a fixed sun, and until he has a fixed dial plate, with a large and small finger (the sun and moon), marking the time thereon, his system of chronology will, *in measure*, be anti-scriptural.

Biblical chronology should be based upon the unchanging fiat of the Almighty designer of the clockwork of the heavens, who in Genesis i, 14, says, "let them be . . . for days and years."

In the presence of this fiat of Almighty God, what becomes of the fiat of Sir Isaac Newton, upon which the whole system of modern astronomy is founded? "The sun is the centre of the solar system and *immovable*." What becomes of the fiat of that "gifted man whose book has won much attention," Mr. Gillespie, and who says "the sun apparently revolves above the earth in a path similar to the figure 8" (?). Every sundial incontestably proves that statement to be false, to bolster up an unfounded theory.

The Zetetic School of practical science teaches that the first chapter of Genesis is literally accurate *in every point of detail*, while the systems of Sir Isaac Newton, or Mr. James Gillespie, are a direct contradiction of it, and, therefore, the support of blantant infidelity, and rebellion against God, in the rejection of His Holy Word, hence we find G. W. Foote asserting that "the Bible gives a false account of the origin of the world; a foolish account of the origin of man, &c."]

BIRMINGHAM. Photography of the heavens will do a good deal for us. It is marvellous what it has done for us at sea. I have seen a photograph of the sea stretching considerably more—from point to point—than twenty miles. As they cannot play any hankey-pankey tricks in this matter the sea must be what the photograp

resents it, and that proves it to be horizontal; the horizon line is as straight as any line can possibly be drawn. Can any evidence be stronger than this to shew conclusively that there is no sea curvature? It seems to me that anything can be made of the so-called "Bedford Canal experiment;" but the photo of the sea settles the whole business. It requires not a word to *explain* anything—there it is for anyones eyes to see, if they will but use and believe them.

A. W.

LIVERPOOL. The Scottish Geographical Magazines from January to April, contains articles on Antarctic Explorations. A Committee are doing their best to induce the Government to assist in sending out a first-class exploring party to those regions. In the No. for March, a statement is made that among other results it would decide as to the "figure of the earth," p. 148.

W. BATHGATE.

This is certainly a tacit acknowledgement that the figure of the earth is *not known by them*, and, consequently, is a justification of our position and teaching! The surface of all water at rest is an horizontal plane, therefore the question is *practically settled*, all that is required now is an honest acknowledgement of the fact. ED.

HALIFAX. Dear Sir,—I went to the British Museum yesterday.

"The Campaignic Universelle," &c., by Lesseps, was out being bound. I got the "Report of Isthmus of Suez," Report and Plan, 1857. From the British report I extracted the following—

(p. 20) "Between the Red Sea and Persian Gulf running from N to S, there is a depression in the soil very distinctly marked, especially in crossing from the bitter Lakes to Lake Tinsah . . . But excepting two tracts of land rising 39 to 49 feet in height, and of *very limited extent*, at the point above mentioned there is a sort of *thalweg* or *nearly horizontal* course across the entire breadth of the Isthmus."

(p. 46) "In 1830, Captain Chesney asserted that the French Engineers must be mistaken (in a previous survey where they had stated that the Suez at high tide was some 150 feet above the Red Sea). Chesney said he had travelled across the Isthmus and explored in several directions and this difference of level could not exist. A party of English officers (1840) surveyed the Isthmus and declared that *the level in both seas was identical*."

Now as to "Silting," on p. 23-24. Lempere, in his scheme, says—"I fear the Silting which the winds from the N. W. may produce." So you see he does not account for Silting on the ground of rotundity.

JNO. S.

LAVENDER HILL. I am exceedingly charmed with "Parallax." The more I read it, the more deeply interested do I feel, and though you cannot turn a thinking mind over to your side in fifteen days (the time the book was lent for), it will give me reflection and mind food for years.

The great reason why people do not care for astronomy, is, because their definitions are not understandable, for *they say one thing and mean another!* No sane man can understand their immense distances; no, not even themselves! If astronomers are not ashamed of what they teach, why don't *they* issue a weekly paper at a penny, one that the world can understand? Surely they could afford to do this, seeing the thousands upon thousands we pay them yearly, and what for?

E. K.

BARKING. I herewith return the pamphlet, *Bedford Canal not Convex*, with many thanks. I have kept it rather longer than I intended, because I wanted to read it carefully. I am quite satisfied that those who claim the earth to be a globe, have no right to use the experiments criticised in the pamphlet as a proof of it.

C. W. A.

ONTARIO. I have found out a new method of proof that the earth and ocean constitute a great circular plane, the region north of the equator being smaller and more central, the region south of the equator larger and of greater circumference. The method of proof is arithmetical based upon the variation of daylight, its increase and curtailment at different latitudes. It is simple, cogent, and irrefutable.

J. T. L.

[Let us have it. ED.]

WILLIAMSTOWN. Dear Sir,—Packet of books and pamphlets to hand. Many thanks for them. They are lucid and convincing, and are already in circulation. The demand for them is surprising. I

have been begged for the loan of your books by Non-Christians and Infidels, as well as by thinking Christians, and I trust much good will result. One man said—"I never did believe the earth was a globe. I have been a sailor nearly all my life, and in the South Sea Isle built several houses and always levelled them by the horizon. This I could not have done had the world been a globe." The encouragement met with makes me wish I could afford to send for a second supply; however, I must be content to wait for two or three months before doing so. Others have expressed their determination of sending for pamphlets; but, as I daresay you know, Victoria is suffering from wide-spread depression.

A. L.

### The Zetetic's Open Column.

The questions in this column are open for Zetetics to reply to.

QUESTION (1). *How do astronomers know the distance, dimension or volume of the stars—say Sirius? How do they know the rate of speed at which the light of heavenly bodies reach the earth?* H. J. RANSOME.

ANSWER (1). They do not "know" anything at all about the substance of either of your questions.

Guillemin (The Heavens, p. 341) says, "if we *suppose* that the intrinsic intensity of the light be the same for Sirius, as for the Sun of *our system*, we shall arrive at pretty clear, if only *conjectural*, views of the dimensions of this magnificent star. On this hypothesis the diameter of Sirius would be fifteen times that of *our sun* . . . the dimensions five times, and its volume 125 times."

He conjectures that light travels to the earth at the rate of "192,000 miles a second." Mr. Leon Foucault conjectures "184,000 miles a second." Sir Robert Ball, "180,000 miles a second." The Editor of *Science Siftings*, "186,000 miles a second;" but he contradicts this

by another conjecture of "196,000 miles per second!" This is all contradicted by a writer in the *English Mechanic*, (July 27th, 1894), who says, "I believe no one now holds the view that light *actually moves*."

A country lad was once taken to hear an eminent astronomer lecture on the distance of the stars from the earth. In the course of his learned lecture he stated that the distance of some of the stars from the earth is so great that the light which now reached us from them must have taken from the days of creation to travel so far. "What do you think of that marvellous fact, young man?" asked his friend. "Law, sir! what a big lie it do be, to be sure," responded Hodge. Poor Hodge, he evidently was not in possession of the "scientific mind," therefore was utterly unable to grasp "that marvellous —."

QUESTION (2). What is the cause of the extremes of temperature and weather in America in latitudes similar to our own where the conditions are comparatively regular and uniform? J. ATKINSON.



### Answers to Correspondents.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o Mr. J. WILLIAMS,  
32, Bankside, LONDON, S.E.

W. CARPENTER.—We regret that your communication—forwarded to us by the late Editor—does not answer the requirements of the Society, on the subject which we desired to make public in these columns. "Public opinion" is turning in our favour. We are hoping to re-issue the pamphlets you mention, but who will help us?

"TRUTH."—Thanks for "scraps," send all you can. See "Our Observatory."

J. ATKINSON.—The late Editor sent us your "Popular Fallacies"—beg pardon, we mean someone else's. In our next. Thanks for cuttings, &c.

W. M. RUNCIMAN.—We regret, that, after advertising for two months, you cannot find a man in New Zealand to openly defend the globular theory! Did the "chief authority on astronomy and cognate matters for the last 30 years in New Zealand" see your challenge? In a letter from him, which we saw (!) he said, "I never met but one member of the sect. I thought they died with the illustrious John Hampden." You might send him a challenge and a Review, just to dispel his fears about our death. His address is Mr. A. Beverly, Heriot Row, Dunedin.

J. C. AKESTER.—According to the highest Zetetic authority, the moon shines with *its own light*.—Matt. xxiv. 29. Whatever evidence contradicts that, is not the outcome of practical investigation.

T. WHITTLE.—"Gravitation," and by consequence "the law of gravitation," has no existence in the Universe. Professor W. B. Carpenter, C.B., F.R.S, in his paper, *Nature and Law*, says—"THE DOCTRINE OF UNIVERSAL GRAVITATION IS A PURE ASSUMPTION." A contemporary science paper informs us that "the history of science shews that ALL THE GREAT LAWS OF MATTER HAVE BEEN DISCOVERED, NOT BY DEMONSTRATION, BUT BY IMAGINATION." Read the article in E. R., No. 2, p. 15, on "The Mystery of Gravitation." As soon as we can, we shall print a series of articles on "gravitation." We are watching its workings in the "scientists'" minds. Our "Open Column" will meet your suggestion.

ULYSSES, G. MORROW.—We have received a letter sent by you to the late Editor. We hope to print a great part of it in our next. Thanks for your kind offer to prepare articles, with cuts, for this Journal. We shall be most happy to receive them. There is much, of course, in your "Electric System" with which we are in full fellowship, but we fear that there is much in it that is only speculation. Still, as Zetetics, we fear not to look into anything professing to present *practical truth*. We should like to see your proofs of an "Enspherical World,"

and what supports it in space? This we take to be the fundamental point in your system, therefore, it should be made *unmistakably plain*.

A. MCINNES.—Thanks for your letter which shall appear in our next issue. By that time we hope to find your name enrolled on the Society's books, as a Member, or Associate. No Journal can exist apart from financial support; if it is worth writing to, it is worth supporting financially.

THOS. WINSHIP.—Thanks for your letter and cuttings from *Cape Argus*. Hope you have received letter and pamphlets, forwarded.

E. M. MANSELL.—(1) Yes, we do know who the "competent disciple of 'Parallax' is, that tried and failed to prove that the earth is flat." We do not wonder that you do not believe it. (2) No, he is not a member of the U. Z. S. (3) Yes, we wrote instantly to the President of the Leeds Astronomical Society, who kindly informed us that the lecture was given on March 1st, 1893. (4) The pages of this Journal are always open to any astronomer, or geographer, who can *prove* the world to be a globe. (5) We consider that their silence is the evidence of their utter inability to prove their case!

E. BREACH, C. S.—Thanks for pamphlet.

ZETETES desires us to notify that he has removed to 23, East Park Road, North Evington, Leicester.

I. S.—"At Greenwich Observatory they publish high-water mark at Greenwich and Liverpool. The difference is only about 1½ ft. How is this? The distance is 200 miles." Could you not write to the Astronomer Royal and ask him the question, and send us his reply for publication? Perhaps it is the same kind of a mistake as they made about the height of the Atlantic and Pacific Oceans. It now turns out that "the Atlantic, and not the Pacific, is the higher of the two Oceans, and in place of the difference in level being hundreds of feet," as has been affirmed, "the surface of the water in the Atlantic is *exactly* six feet and a half higher than it is in the Pacific!"

MR. PERRY delivered two lectures at the Ashton Temperance Hall, and gave, as one proof that the surface of water is horizontal, the fact that Mount Egmont, 8,838 feet high above sea level, was discernable from the deck of vessels at sea a distance of 160 miles. Other proofs were given, illustrated by diagrams.

N. B.—Replies sent to our "Open Column" must *not exceed* 200 words.

Will Members, whose Subscriptions are due, kindly forward them to the Secretary with as little delay as possible.

This Journal will be forwarded to any address, for twelve months, on receipt of 10d. in advance. Address Secretary.

### A SUN SPOT.

"The Detachment of a sun-spot is the origin of a planet." ENGLISH MECHANIC.

"The earth is a planet," i.e. an old worn-out sun-spot, which the sun having no use for, threw off its face into "infinite space," where it revolved, until it evolved into a fire planet with a "crust," from which astronomers view its old parent's face.

BALAAM'S ASS.



## A PRACTICAL MAN ON PROTOPLASM.

A Member of the "Mutual Admiration Society," and an enthusiastic admirer of Professor Huxley, called on a friend to invite him to come and hear the Professor on Protoplasm. He spoke so extravagantly about him that his friend finally became curious, and asked—"Who in the world is this Huxley, anyway?"

HUXLEYITE.—"You don't mean to say you have not heard about Professor Huxley, the great scientist?"

PRACTICAL MAN.—"Yes I do though; never heard his name before; what has he done?"

H.—"Why, man, Huxley made the important discovery about Protoplasm."

P. M.—"About what? Protoplasm? And what in the name of common sense is Protoplasm?"

H.—"Now look here, you don't mean to sit there and tell me you don't know what Protoplasm is?"

P. M.—"That's just it. Can you tell me what is Protoplasm?"

H.—"Well, Protoplasm is—yes—is—well—what we call 'the life principle.'"

P. M.—"O, I see! It's something to do with life insurance societies, and Huxley is a successful canvasser, eh?"

H.—"O, nonsense, it is the life principle in nature—the starting point of vital action."

P. M.—"O! he discovered that, did he?"

H.—"Yes, he discovered it some years ago in England."

P. M.—"And what good is it a going to do?"

H.—"Good? A great deal of good. It expands the circle of human knowledge, and is valuable in bearing out the theory of Evolution. It is a noble and most important contribution to science, and it has made Huxley one of the few immortal names that were not born to die."

P. M.—"So Huxley knows all about the life principle, does he?"

H.—"Yes, *all* about it."

P. M.—"And the starting point of vital action?"

H.—"Yes, *all* about it."

P. M.—"Well, see here now: can he take some of that Protoplasm and make a man, or a horse, or an elephant with it?"

H.—"O no, of course he couldn't do that."

P. M.—"Can he take it and make anything at all of it—even a gnat or a fly?"

H.—"O no, of course not."

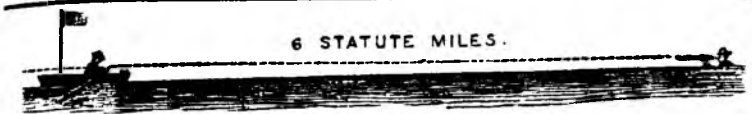
P. M.—"Well then, Huxley may just go to Jerico with his Protoplasm. I don't believe its worth two cents a pound, anyhow. It appears to me those scientific fellows put on a big lot of airs about very little things. Protoplasm, eh! Shouldn't wonder if Huxley came over here to get up a company to work it. I tell you what it is, my friend, its a swindle. Did you say the mine is in England?"

EXIT HUXLEYITE.

Yankee Judy.

## THE EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



"Parallax" Experimentally Proving Water to be Horizontal.

NO. 2 (NEW SERIES).

JANUARY, 1895.

PRICE 2D.

## THE PRETENSIONS AND PRETENCES OF MODERN ASTRONOMY.

*By James Naylor.*

*(Concluded.)*

Now it is impossible not to see as these pretences are pointed out, that Kepler's first law is a palpable absurdity, and one is irresistibly reminded of the definition of the crab, said to have been given by the French lexicographers "as a large red fish, which walked backwards!" This definition on being submitted to Cuvier was stated by him to be PERFECTLY CORRECT, except that the crab was not large, was not a fish, was not red and did not walk backward! So with Kepler's first law "that the planets revolve in elliptical orbits, the sun being situated in one of the foci." This also is "perfectly correct," except that the planets do not revolve, do not move in orbits, do not describe ellipses, and do not have the sun occupying their common foci. The lexicographer's definition of the crab was absurd, and Kepler's first law is equally so. Of course it can be replied to our position that the law holds good IF THE SUN IS SUPPOSED TO BE STATIONARY, and such a supposition it is alleged enables the planetary motions to be much more easily apprehended. But this argument practically gives itself away. It justifies our charge to the letter, viz., that the commonly taught doctrines of the planetary motions are but a gigantic pretence, put for a set of conditions with which they have no common agreement. A simple illustration will make the absurdity of the argument perfectly clear.

There are a number of persons going along the road, and while one in particular keeps straight forward, the rest proceed irregularly, being sometimes to the right, sometimes to the left, then to the front, and yet again to the rear of him. These movements well illustrate the astronomer's teachings as to the motions of the sun and the planets. Now

## A PRACTICAL MAN ON PROTOPLASM.

A Member of the "Mutual Admiration Society," and an enthusiastic admirer of Professor Huxley, called on a friend to invite him to come and hear the Professor on Protoplasm. He spoke so extravagantly about him that his friend finally became curious, and asked—"Who in the world is this Huxley, anyway?"

HUXLEYITE.—"You don't mean to say you have not heard about Professor Huxley, the great scientist?"

PRACTICAL MAN.—"Yes I do though; never heard his name before; what has he done?"

H.—"Why, man, Huxley made the important discovery about Protoplasm."

P. M.—"About what? Protoplasm? And what in the name of common sense is Protoplasm?"

H.—"Now look here, you don't mean to sit there and tell me you don't know what Protoplasm is?"

P. M.—"That's just it. Can you tell me what is Protoplasm?"

H.—"Well, Protoplasm is—yes—is—well—what we call 'the life principle.'"

P. M.—"O, I see! It's something to do with life insurance societies, and Huxley is a successful canvasser, eh?"

H.—"O, nonsense, it is the life principle in nature—the starting point of vital action."

P. M.—"O! he discovered that, did he?"

H.—"Yes, he discovered it some years ago in England."

P. M.—"And what good is it a going to do?"

H.—"Good? A great deal of good. It expands the circle of human knowledge, and is valuable in bearing out the theory of Evolution. It is a noble and most important contribution to science, and it has made Huxley one of the few immortal names that were not born to die."

P. M.—"So Huxley knows all about the life principle, does he?"

H.—"Yes, *all* about it."

P. M.—"And the starting point of vital action?"

H.—"Yes, *all* about it."

P. M.—"Well, see here now: can he take some of that Protoplasm and make a man, or a horse, or an elephant with it?"

H.—"O no, of course he couldn't do that."

P. M.—"Can he take it and make anything at all of it—even a gnat or a fly?"

H.—"O no, of course not."

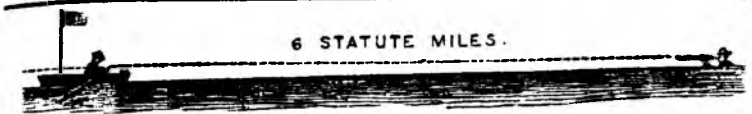
P. M.—"Well then, Huxley may just go to Jerico with his Protoplasm. I don't believe its worth two cents a pound, anyhow. It appears to me those scientific fellows put on a big lot of airs about very little things. Protoplasm, eh! Shouldn't wonder if Huxley came over here to get up a company to work it. I tell you what it is, my friend, its a swindle. Did you say the mine is in England?"

EXIT HUXLEYITE.

Yankee Judy.

# THE EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



"Parallax" Experimentally Proving Water to be Horizontal.

NO. 2 (NEW SERIES).

JANUARY, 1895.

PRICE 2D.

## THE PRETENSIONS AND PRETENCES OF MODERN ASTRONOMY.

*By James Naylor.*

*(Concluded.)*

Now it is impossible not to see as these pretences are pointed out, that Kepler's first law is a palpable absurdity, and one is irresistibly reminded of the definition of the crab, said to have been given by the French lexicographers "as a large red fish, which walked backwards!" This definition on being submitted to Cuvier was stated by him to be PERFECTLY CORRECT, except that the crab was not large, was not a fish, was not red and did not walk backward! So with Kepler's first law "that the planets revolve in elliptical orbits, the sun being situated in one of the foci." This also is "perfectly correct," except that the planets do not revolve, do not move in orbits, do not describe ellipses, and do not have the sun occupying their common foci. The lexicographer's definition of the crab was absurd, and Kepler's first law is equally so. Of course it can be replied to our position that the law holds good IF THE SUN IS SUPPOSED TO BE STATIONARY, and such a supposition it is alleged enables the planetary motions to be much more easily apprehended. But this argument practically gives itself away. It justifies our charge to the letter, viz., that the commonly taught doctrines of the planetary motions are but a gigantic pretence, put for a set of conditions with which they have no common agreement. A simple illustration will make the absurdity of the argument perfectly clear.

There are a number of persons going along the road, and while one in particular keeps straight forward, the rest proceed irregularly, being sometimes to the right, sometimes to the left, then to the front, and yet again to the rear of him. These movements well illustrate the astronomer's teachings as to the motions of the sun and the planets. Now

should we not deem a person as qualifying for a lunatic asylum, who observing the movements of these persons gravely informed us we could much better understand their character if we *supposed* the persons as not moving forward at all, but as marching around the particular individual whom we characterized as moving along straight in front of him. Yet this is precisely the kind of argument under review, for in it we are gravely told that continuous forward movement, in all but the case of the sun, most erratic in character, can be best understood by *supposing* no forward movement at all, but a fixed point occupied by the sun, and the planets moving regularly round it. Truly absurdity could scarcely go to greater length, and having pointed it out we may well leave the exposure of further pretences to a future paper.

Before concluding the present one, however, it will be necessary to dispose of one or two refuges into which the perplexed Newtonian astronomer may betake himself. First, let us amply justify our statement of the sun's alleged motion through space, for ordinarily this matter is not brought prominently forth in the usual works on astronomy. Our first extract shall be from Beeton's Dictionary of Science, p. 1556: "The elder Herschel having examined the subject, announced that like the stars, the sun and its attendant planets were also subject to translation in space. He announced that the solar system was moving towards a point in the heavens near the (a) star (in) Hercules. These views have been confirmed by the subsequent researches of Sir William Herschel, Strave, Arlegander and others, the very latest view of the subject gives the motion of the sun and its planets as being at the rate of 150,000,000 miles yearly." The foregoing extract clearly states the astronomical belief of the sun's motion through space in a right line accompanied by the planets. The following extract from Bali's Elements of Astronomy, p. 329, arts. 133, shows what effect such motion must have on the orbit of the earth:—"We thus see that the real motion of the earth in space is of a very *complicated* character, for though it describes an ellipse about the sun in the focus, yet the sun is itself in constant motion, and consequently the real motion of the earth is a *composite movement*, partly arising from its own proper motion around the sun, and partly arising from the fact that as a member of the solar system, the earth partakes of the motions of the solar system in space." This extract shows, that so far from the orbit of the earth being similar to the neatly drawn ellipses that we see in astronomical works, such orbit is admittedly both of a *composite* and a *complicated character*. The next extract from Young's General Astronomy, art. 804 and 806: p.p. 460, 461, still further elucidates the kind of movement, and we may also state here, that the figure referred to (p. 217) is nearly a fac simile as regards the path of the earth to the one we have produced. The

extract will also illustrate an astronomer's easy way of getting over a difficulty, viz., by calling opponents names, when reason and argument are really the things required. "The proper motion of the stars are due partly to their own real motion, and partly also to the motion of our sun, which is moving swiftly through space, taking with it the earth and the planets. The velocity of the sun's motion in space is about 16 miles per second, but this result must be considered as very uncertain

It is to be noted that this *swift* motion of the solar system, while of course it affects the real motion of the planets in space converting them into a sort of *corkscrew spiral* (like the figure p. 217), does not in the least affect the relative motion of sun and planets, as some paradoxers have supposed it must." We trust to thoroughly expose the professor's opinions in our next paper as to not affecting the relative motion of sun and planets, meanwhile the following opinions of Edward Carpenter (who certainly cannot be called a paradoxer) taken from his "*Civilization its Cause and Cure*," p.p. 53 to 55, will be an excellent foil to the Professor's statement that only paradoxers differ from him on this particular matter. "Or to take an instance from astronomy. We are accustomed to say that the path of the moon is an ellipse. But this is a very *loose statement*. On enquiry we find that owing to perturbations *supposed* to be produced by the sun, the path deviates considerably from an ellipse. In fact in strict calculations it is taken as being a certain ellipse *only for an instant*—the next moment it is supposed to be a portion of *another ellipse*. We might then call the path an irregular curve somewhat resembling an ellipse. This is a new view. But on further enquiry it appears that while the moon is going round the earth, the earth itself is speeding on through space about the sun in consequence of which *the actual path of the moon does not in the least resemble an ellipse*. Finally the sun itself is in motion with regard to the fixed stars, and THEY are in movement too. *What then is the path of the moon? No one knows*—we have not the faintest idea—the word itself ceases to have any assignable meaning. It is true that if we agree to ignore the perturbations produced by the sun—as in fact we DO ignore perturbations produced by the planets and other bodies—and if we agree to ignore the motion of the earth and the flight of the solar system through space, and even the movement of any centre round which that may be speeding, we may then SAY that the moon moves in ellipse. But this has obviously nothing to do with *actual facts*. *The moon does not move in an ellipse—not even relatively to the earth*"—and probably never has done, and never will do so. It may be a convenient view, or fiction to say that it would do so under such and such circumstances—but it is *only a fiction*. To attempt to isolate a small portion of the phenomena from the rest in a universe of which the UNITY is one

of science's most cherished convictions, is obviously self-stultifying and useless.

But you say it can be proved by mathematics that the ellipse would be the path under these conditions; to which I reply that the mathematical proof though no doubt cogent to the human mind (as at present constituted in most people) is open to the same objection that it does not deal with actual facts. It deals with a *mental supposition, i.e.*, that there are only two bodies acting on each other—a case which never has occurred and never can occur—and then assuming the law of gravitation (which is just the thing which has to be proved), it arrives at a mental formula the ellipse. But to argue from this process that the ellipse is really a thing in nature, and that the heavenly bodies do *move*, or even *tend* to move, in ellipses, is obviously a most unwarrantable leap in the dark. Finally you argue that the leap is warranted, because, by *assuming* that the moon and planets move in ellipses, you can actually foretell things that happen, as for instance the occurrence of eclipses, and in reply to that I can only say that Tycho Brahe foretold eclipses almost as well by assuming that the heavenly bodies moved in epicycles, and that modern astronomers actually do apply the epicycle theory in their mathematical formulæ. The epicycles were an assumption made for a certain purpose, and the ellipses are an assumption made for the same purpose. *In some respects the ellipse is a more convenient fiction than the epicycle, but it is no less a fiction.*

Few words are needed after such a crushing condemnation of current astronomical teaching as is given in the foregoing. It will only be necessary to point out that all the ordinary refuges of the astronomical devotee are disposed of. He cannot plead that the motion of the solar system in space is a myth and not taught by the astronomers. It is useless also to insist that the views we have put forth are mere *Zetetis misapprehensions*. The quotations from Edw. Carpenter effectually disposes of that. Neither can it be alleged that the diagram is a distorted perversion of the case, for in all its essential features, it is but a counterpart of Professor Young's! What other ways may be urged for minimizing our position we will not attempt to point out.

## IMAGINARY ASTRONOMY.

By Alex. McInnes.

The Readers of the "Arabian Nights" and Baron Munchausen's "Voyage to the Moon," can, with ease and delight, turn to the romance of Modern Astronomy; the popular text book being that by Herschel.

After taking advantage of the universal ignorance of true perspective, so as to make "students" of astronomy believe that the surface of the sea is globular, and persuading simpletons that they cannot judge of motion by the senses, he asks us to

*imagine* those vast tracts of land called continents, adhering fast to oceans unfathomable yet as rigid as steel, so as to make something like a little school-room globe.

Next, we are to *imagine* ourselves little flies, or midgets, crawling on the globe, off which we cannot fall, though it whirls faster than lightning. But the children's toy needs an axis to whirl round, so that day and night may be accounted for, and so we are accordingly told that there is an *imaginary* one, that is, there is an axis, but it is inside our brains. Then the *imaginary axis* has two ends, called "North and South Poles," also *imaginary*. Now the word axis means axle, or axletree, and therefore, the *imaginary axis* must be itself a pole. Thus, Herschel's axis with two ends are three poles, and yet no poles at all, being only *imaginary*. Whoever heard of a wheel turning on an *imaginary axis*, even though the axis were *imagined* by the coachmen to be three poles? Again, the globe must be *imagined* to turn round with the greatest exactness in 24 hours, and so we must *imagine* it to *stand* on an *imaginary plane*, viz: no plane at all! Yes, the plane must be *imaginary*, because afterwards, when we are treated to an "explanation" of the solar system, we must *imagine* the globe no longer standing on a plane, but flashing round the sun much faster than a thunderbolt along the sky. Now, as it flashes and wheels, we are asked to *imagine* that the side turned away from the sun is as dark as night. But, how then can we forget that at another time we are to *imagine* the earth only a mote compared to the sun (a million times larger), which floods it with light, streaming many millions of miles beyond, so that there can be no dark side?

The imagination being thus excited to vigorous exercise, Herschel proceeds to "explain" the cause of the cause of the four seasons. We are, therefore, to *imagine* the globe as not standing quite upright on an *imaginary plane*, but lurching always over as much as  $23\frac{1}{2}$  degrees, and we may also *imagine* the globe to have intelligence enough to keep its North Pole always at the said angle, as if a rigid fixture, by way of preserving the "parallelism of its axis." So we *imagine* the globe to *stand* on its *imaginary plane* in four different positions as it dashes along its *imaginary orbit* 1000 times faster than any railway engine, so that the sunlight may fall slantingly on one part of the globe and perpendicularly on another.

But since Herschel *imagines* the globe only a millionth of the sun in size, therefore, comparatively a mere mote, and 95 million miles off, reason would say that there can be no difference between perpendicular and sloped rays, yet we must remember that the astronomer requires us not to reason but to *imagine*.

Still, after all, the "North Pole" is not a fixture. The *imaginary pole*, while according to Herschel is "nothing more than the vanishing point of the Earth's axis" is *imagined* to describe an *imaginary circle* round another *imaginary pole* of an *imaginary circle* called the ecliptic in 25,868 years. Then we are to *imagine* still more. The pole, fixed at an angle of  $23\frac{1}{2}$  degrees, and yet not fixed, is *imagined* to have a nodding motion, or "nutation," by which it describes a minute ellipsis (a kind of egg-shaped curve) among the stars in the course of 19 years. These two motions of the no-pole-at-all we are to *imagine*, in order that the precession of the equinoxes, &c., may be accounted for.

Further demands are made upon our *imagination*. The school-boy globe so small is again *imagined* to be of so many millions of millions tons weight that we are utterly dumb-founded, and it is *imagined* to be balanced and flashed about the sun by two *imaginary powers*, called centripetal and tangential. The centripetal as the name signifies, is *imagined* to pull the big globe away towards the sun and the other power to pull it away from the sun. Now, were Sir John to allow us here to reason, we would say that in consequence of the two *imaginary* forces pulling in different directions, the globe ought to stand still. Not at all! for we are requested to *imagine*

that the result of the pulling is that the big globe "moves" in not quite a circle, but nearly so, round the sun within about 365 days, and at the rate of 19 miles every tick of the clock. Wonderful as is the imagineless weight of the big globe, more wonderful still must be the centripetal and tangential powers to flash at once so many million miles, tons of rock round the sun, whilst keeping up the lightning speed for so many thousand years. How wonderful too the brains out of which such wondrous powers have come! Talk no more of the wonders of steam, or laugh at the ravings of lunatics.

Then what of the poor wretches being on the astronomer's globe of such fearful rapidity and horrible tossing?

Thus the astronomer can "a tale unfold, whose lightest word may burn up our soul, freeze our human blood, make our two eyes like stars start from their spheres," &c.

Our tormentor is, however, not yet done with us. We must *imagine* more poles and globes, also an equator with circles large and small, longitudes, latitudes, so that we may have a science of navigation, and so *imagine* ships and sailors safe at sea, though they are lost by thousands every year.

We have been required to *imagine* the "earth" ball whirling and rushing round the sun; but again, we are told that an *imaginary circle* in the heavens, called the ecliptic, represents the apparent course of the sun round the earth. The word "apparent" is to remind us that the *real motion* of the sun is not real, despite our eyesight; for, according to Herschel, our eyes are not for seeing, but *imagining*!

Then the *imaginary ecliptic* necessitates the *imagining* of a celestial axis with two celestial poles, also two equinoxes, two solstices, in short an *entirely imaginary globe* which is to be called celestial, or heavenly. Then surely there is a heaven after all? But stop, ye mesmerised dupes of Herschel! You are to remember that heaven is not heaven, but something else, that is, something *imaginary* or nothing, yet something, notwithstanding. Thus we *imagine* the "earth" globe encased within the celestial one, like a letter within an envelope. Next, we are to *imagine* on the outside globe circles of latitude and longitude, right ascension, and declination, so that we may *imagine* all the stars fixed securely in their places. But stop! we are to *imagine* the stars again as not fixed, but flashing through many millions of miles, faster than we can wink, and not even are they stars, according to Herschel, but suns, except as many as he pleases to name after the old heathen idols—Jupiter, Mars, Venus, Neptune, &c., which again are not stars, but big globes outflashing the thunderbolts. Nor will this dictator allow us to believe our eyes, that stars are so near, or all *in* the sky, but at various distances, varying by millions of miles; the figures given only bewildering *our imagination*. Through the book the mystification is increased by cunning diagrams, mathematical jargon, and Greek words almost unspellable. With all this exercise of the *imagination* we ought to be heartily tired out. But the tender mercies of the wicked are cruel, and, so Herschel would further have us *imagine* infinite space, infinite ether, and an infinite number of globes, almighty gravity and tangential force; and the bewitched fools are left in darkness to *imagine* that there is no infinite Almighty God.

### "SOMETHING ON GRAVITATION."

By "Zetetes."

A correspondent, interested in Zetetic Truth, asks me for "Something on Gravitation." I propose, therefore, to give a few of my thoughts thereon in the *Earth Review*, as others besides my missionary friend may be interested in reading something on this subject.

But a difficulty meets one at the outset. How am I to write "something" about nothing? I cannot create, as some erroneously suppose the world was made, out of nothing. Paul says the things which are seen were not made out of "phenomena," or things which do appear; but he nowhere teaches that they came out of absolutely nothing, except invisibility. Now, "Gravitation" has been created, not only out of invisibility, but out of nothing, except the vain imaginations of astronomical minds. It was not "discovered," but *invented*; and I shall proceed to prove that there is no such thing as the "attraction of Gravitation" in God's universe, and that the phenomena supposed to countenance the theory are capable of other and more natural interpretations. Of course, I speak of "Gravitation" in the astronomical sense of a universal power in all bodies, celestial and terrestrial, to attract, or pull one another together, with forces directly in proportion to their masses, and inversely as the squares of their distances. So that terrestrial attraction and phenomena will be seen to be only a small part of this question of Universal Gravitation. The former we may explain by weight and currents; but the latter we utterly deny. Let us try, in the first place, to realize what is meant by, and implied in the astronomical theory of gravitation, and its

#### UNIVERSAL ATTRACTION.

According to this idea, every body in the universe, however large or small, has the power, by some means or other, to attract, or pull towards itself, every other body in the universe, however near or distant. Yea, not only is every body supposed to have this power, but the power is said to be in actual operation every moment of time for ever. So that, if I hold an apple in my hand, it is connected with, and pulling at all the apples in the world; all the pears and plums, all the trees, gardens, walls, houses, all the stones, rocks, rivers, and mountains; yea, and every separate drop of water in the ocean, and every grain of sand on the sea shore! *And these are all pulling at the apple.* Yet it remains passively on my hand, while I study gravitation, or decide whether I will eat the apple now, or leave it for further experimentation. This apple ought to dance about, or at least to show some symptoms of the awful internal struggles going on within it. Perhaps it has learned the art of appearing passive, an art which some astronomers seem to acquire, and to keep a quiet and serene countenance, while internally tortured with ten thousand doubts and pangs. Ten thousand! Yea, ten thousand times ten thousand gravitating cords or strings are pulling at it! For we must remember that sun, moon and stars, and supposed millions of millions of "other worlds than ours" are each and all interested in that apple; and they send out their innumerable long and filamentous fingers to clutch it out of my open hand. Yet it remains outwardly unmoved in

serene and blushing passivity. I shall have to eat it, threads and all, with whatever tentacles, or other attractive matter may be attached to it! What a peril! But there is such an attractive force, either in the apple, or in the natural taste God has given us for common fruit, as well as for common sense, that I take all risks and disappoint the sun and stars. I am glad that Newton was led to muse over an apple falling to the ground by its own weight, when the stalk was rotten. He would have mused more had it "fallen" upwards.

But we, dear reader, can also muse over apples. While so musing, I wonder why my apple makes no tremulous motion towards the moon, which is rising as I write, especially as she is now between the two "ponderous and superior" planets, Mars and Jupiter, which are approaching towards conjunction. Yet through the varying positions and relationships of the heavenly bodies, as they roll around the world and my apple, it remained on the shelf twenty-four hours perfectly stationary, as though no such tremendous forces were playing their mighty artillery upon it. They may try from their various vantage grounds, east or west, north or south, mid-heaven or sideways, yet the apple will not move. Yet a breath would have caused it to roll. There is no proof for Zetetics of universal attraction in this apple. But perhaps mine is different from Newton's. It will not bow to fair Luna as she pulls it sideways, assisted by the two powerful giants, one on each side, attending her like guards, much less will it attempt to rise towards the mighty sun as he pulls with all his meridian power and glory. Its weight is the same throughout the twenty-four hours. No! friends. I must see an apple "fall" upwards before I can believe in solar gravitation.

But a superficial thinker may object that the reason bodies only fall downwards to the earth is, because the earth being nearer than the sun, its force of attraction is the greater of the two. Is it? Let us take another instance, which proves, not only that there is no such thing as terrestrial gravitation, or attraction, but which shows that this supposed power may be defied.

#### GRAVITATION DEFIED.

In the science schools of to-day our pupils are taught the atomic theory, namely: that all bodies consist of innumerable minute particles, so small that they are invisible and cannot be further divided, or cut up, as their name, *atoms*, implies. These atoms, the gods of the scientist and evolutionist, may all be the same size, if we can attach size to such infinitely small things, or potentialities, but they have not all the same specific gravity or weight. Hydrogen, a kind of gas, is the lightest body known. Hydrogen may be obtained by a combination of sulphuric acid, zinc clippings, and water. As the gas bubbles up through the water we catch a little in a glass bottle, or a test-tube. We may fix our mind's

eye upon one molecule of hydrogen, and let all the others go free. We work this molecule safely inside a small glass tube. It is the lightest body known upon the earth, and it is easier to pull about light bodies than heavy ones. Now, the theory of gravitation is that all the atoms in the earth and in the world are attracting, or pulling at this molecule of hydrogen; and that, being nearest to the earth, the latter will have the most power over it. We will not pause to show further the absurdity of this theory, and the infinite number of bonds and filaments our little molecule must possess to be in pulling connection with all the atoms of the universe; but we will proceed to liberate it from the bottle, not from the bonds, and watch, with mental vision, its behaviour, on being so far set free. Now what course ought the molecule to take, if the theory of our astronomical friends be true? Clearly and rapidly *downwards* to the earth, pulled down unmercifully by ten thousand times ten million threads or gravitating cords. We turn the bottle neck downwards and draw the cork. The molecule of hydrogen ascends in the glass, and refuses to leave the bottle. Remember, every atom in the so-called "globe" is pulling with all its might at our little molecule of hydrogen; yet it refuses to leave the jar! Turn the glass right side up, and now our molecule, really liberated, mounts up above the highest clouds, in complete defiance of the combined pull of all the gravitating forces in the "globe." That molecule must be a Zetetic. It stands aloof from all the nonsensical "forces," or theories, of the astronomers, and mounts upwards and onwards in defiance of them. It defies, as we defy, all their metaphysical "reasonings" and jargon about gravitation. If bodies falling to the earth prove gravitation, what do bodies ascending from the earth prove? If the "globe" can pull at a distant body like the moon and make it "fall" through sixteen feet per second, why can it not pull at air, smoke, clouds, gases, &c., close at hand, and make them all lie down in layers upon its surface? The conclusion is evident: a force that cannot overcome a little helpless molecule of hydrogen, is no force at all. The apple was too much for it, and so is the molecule. Bodies rise or fall, according to their inherent density, or weight, and they remain at rest whenever and wherever they attain their equilibria. This is reasonable, because it is natural; yet at the same time it is utterly opposed to the fanciful speculations of the scientists, who darken counsel with words without knowledge. In the whole wide world there is no such thing as the astronomer's "attraction of gravitation." I challenge any of them to prove it. I will, in conclusion, proceed to show that their idea of

#### ATTRACTION IS A MYTH!

The attraction of gravitation a myth? Yes! a fabulous story, with no foundation in fact, though having an APPARENT support in some



terrestrial phenomena. Many people imagine that gravitation is a word representing some discovered fact or force in Nature; but let them proceed to show us what fact or force, and they will discover their mistake. Gravitation was an *invention*, not a discovery; and a supposition necessitated by another hypothesis, viz.: the globular theory. One was invented to support the other. Without gravitation the globular theory falls; and without the globular theory what would become of gravitation? It would become less and lighter than our little molecule of hydrogen, and fly away into unknown and uncivilized regions.

"Parallax" proved the globular theory false, by the FACT that the surface of water is horizontal; and "Zetetes," the investigator after Truth, practically proves, that the theory of gravitation is utterly false, by a little molecule of hydrogen gas! No one can even tell us what gravitation is, or how it acts. Now, although we may not know what electricity is, or magnetism; we do know how they act. As I showed in No. 2 *Earth Review*, Newton did not know how gravitation acts, or whether it really be attraction, or repulsion; that is, he did not know whether there is such a thing as attraction or not. Where Newton failed to *guess*, what other mathematician dare try? If the inventor did not know, who amongst his pupils can tell? But they should first prove that gravitation does act before they attempt to explain how it acts. The magnet is no proof of gravitation. Its power is selective and limited. It *seems* to attract steel and soft iron, but it will *not* draw stones and wood! Gravitation is supposed to attract *all bodies*, even the stars. They are all supposed to be pulling hard at one another, yet they never get any nearer together. It is strange! But does the magnet really attract steel? The iron or steel goes towards the magnet, but is its motion caused by the attraction or the repulsion of some force? It may be carried by a magnetic current, not drawn by the magnet itself. Newton confessed that the idea of bodies acting "upon one another at a distance," and "without the mediation of anything else by and through which their action and force may be conveyed from one to the other," is "so great an absurdity, that," says he, "I believe no man, who has in philosophical matters a competent faculty of thinking, can ever fall into it." Yet many do fall into this error. They are not Zetetics. I stand on a bridge and I watch a log of wood coming down the stream towards the bridge. Is the bridge attracting the log from a distance? Yes, as much as ever the magnet attracts the soft iron! If there were a weir by the bridge, the log would remain by it, as the iron remains attached to the magnet. If not, and if the arch under the bridge be sufficiently wide, the log would pass under and follow the stream. Then the bridge would seem to be repelling the log, like one "pole" of the magnet will repel the magnetic needle. Yet by such flimsey arguments and pre-

texts is the theory of attraction supported. No man in the world can define gravitation, nor tell how it acts: it is a tissue of philosophical speculations and falsehoods, unworthy of honest men and thinkers. Perhaps the most ingenious theory of gravitation ever proposed is that of Le Sage. He "imagines," says Mr. J. E. Gore,

"An infinite number of ultra mundane corpuscles of excessive minuteness, speeding through space in all directions, and with enormous velocities. Two bodies in this ocean of flying corpuscles screen each other from the molecular bombardment, and would consequently move together with a force varying inversely as the square of the distance."

Upon which Professor Tait remarks:—

"It is necessary also to *suppose* that the particles and masses of matter have a cage-like form, so that enormously more corpuscles pass through them than impinge upon them; else the gravitation action between two bodies would not be as the product of their masses."

Well might Sir John Herschel say:—

"The hypothesis of Le Sage, which assumes that every point of space is penetrated at every instant of time by material particles *sui generis*, moving in right lines in every possible direction, and impinging upon the material atoms of bodies, as a mode of accounting for gravitation, is too grotesque to need serious consideration!"

"Too grotesque to need serious consideration!" One of the *best* theories of gravitation "grotesque!" And a clever astronomer says so, not an humble zetetic! An humble zetetic agrees with him though. What then must the poorer theories be? Readers, take your choice between common sense and reason, and theories "too grotesque to need serious consideration."

## THEORY v. PRACTICE.

### C. H. REPLIES TO G. M.

G. M.'s argument seems to be that lines drawn from the flat earth to the sun's centre need not meet at one point. This looks absurd at first sight, for they must all meet at the sun; the sun cannot have several different positions at the same time. If it is at A' (Fig. 3) and consequently 30° high to an observer at A, it cannot be at the same time at C', 22½° high to an observer at C. A thing can only be in one place at one time, and this place must be where the various lines meet which represent the directions in which it is seen. In fact G. M.'s "utterly condemning fallacy" seems to me to be rather more obviously true than the axioms of Euclid!

But G. M. tries to support his seemingly absurd assertion by saying that the lines drawn from the *supposed* globular earth to the sun's centre do not meet at one point either, seeing they are all *practically* parallel. But (1) if orthodox astronomy did contain an absurdity, that would be no reason why Zetetic astronomy should contain the same. (2) I admit they are *practically* parallel, for they meet so far away that the angle at their meeting is less than 17" all but imperceptible to the naked eye.

C. HARPUR.

G. M. REPLIES TO C. H.

OR

## THE PROJECTION OF LATITUDE UPON A PLANE EARTH.

By the above reply to my criticism of Mr. Harpur's paper, it seems necessary to remind him of the data by which the latitude is found—which he quotes as authoritative—and which he himself accepts as reasonable. I merely put them succinctly in the statement that "latitude is a deduction from the observed altitude of an object in the heavens whose declination is known;" and further, "that the observed altitude varies according to the latitude; and in the case of an object when vertical to the equator, that the observed altitude and the latitude are complementary."

Now all that is involved in these statements is incontrovertible. Consequently the methods of finding the latitude are quite independent of any knowledge of the sun's ACTUAL position—the requirement being the OBSERVED altitude, *i.e.*, the observed angular elevation, and this of course gives merely the sun's APPARENT position.

My claim is that my figure 3 represents a fair reduction to construction of actual observation, upon the plane earth theory. Mr. Harpur says the same of his figure 2. Yet he does not even pretend to give the ACTUALLY OBSERVED altitude in any of his triangles—but simply presents us with a diagram of what he SUPPOSES would represent the earth's surface—in latitude—if viewed by an observer stationed at the sun's centre; *i.e.*, to observe the angular elevation of the sun above the horizon of some point upon earth's surface, he would observe earth's surface from the sun—which of course is simply to remove the discussion from the region of ACTUAL OBSERVATION into that of PURE IMAGINATION which cannot be shown to have ANY CONNEXION WITH ASCERTAINED FACT. Let us waste no words in mere bald assertion; but try our two methods by RESULTS. We have in Nature clear indication of certain distances in latitude, with which every theorist must necessarily comply. First, that point, the Northern Centre, having in its zenith the "pole of the heavens" the point around which the whole starry firmament APPEARS to revolve: Secondly, the Torrid Zone, the belt which receives the direct rays of the sun; its boundaries being the tropics, the lines at which the sun *turns* upon its return journey: Thirdly, the bisection of the Torrid Zone by an IMAGINARY LINE—the equator. It is accepted that latitude at the equator is zero: that the Northern Centre shall be  $90^\circ$  north; ascertain the numerical value of this distance, and we have a NATURAL MEASURING ROD. Take it at the easy round number of 4,000 miles, no one contends that the distance exceeds this, but rather that it is a little less; now apply Mr. Harpur's method, and as we have already shown,  $45^\circ$  of latitude, or 2,000 miles,

become expanded into 93,000,000 of miles. But by my simple method as shown in connexion with figure 3, the distances in latitude as found by angular measure, are projected upon the plane in simple arithmetical proportion of  $90^\circ$  arc to the radius of 4,000 miles.

The attempted application of trigonometry to the projection of latitude, observing from the sun's centre, is contradicted by both reason and results!

Again, let Mr. Harpur proceed upon his accepted data, and deal with actual observations—confine himself to the above natural indications of latitude, and then make clear the fallacy he supposes to be lurking under figure 3, his will be the honour, ours the profit of his instruction.

*Upon the theory of a globular earth it is equally true that lines from earth's surface do not meet at a point in the heavens!* This shall be shown clearly enough when you, Mr. Editor, are able to admit a paper upon "Finding the Latitude." Till then let what was said upon this point under figure 3 suffice.

Just a word upon the subject of parallax; it will be easy to show in a separate paper that in spite of all that is accepted upon this subject, *no such angular value CAN REALLY BE FOUND IN ASTRONOMY!* The fallacy of the astronomer is precisely analogous to that of Mr. Harpur, *they recede from the region of ACTUAL OBSERVATION into that of ABSTRACT SPECULATION.* No orthodox writer upon parallax ever introduces the horizon of the station of observation upon his diagrams! For him to do so would be fatal to any attempt to find the required triangle!

For the sake of illustration, a triangle is ASSUMED, and of course all that follows is simply of the nature it exercises in abstract mathematics. If, upon the introduction of the horizontal line, they could find any angular value, that would be a direct proof of some error connected with the observation, because of the incontrovertible fact, that latitude and altitude vary directly.

But look at *results* here also. The distance of the sun from earth is stated in numbers which vary from 1,525,000 to 135,304,805 miles, a DIFFERENCE which exceeds the accepted value of nearly 95,000,000 miles. Rather a wide margin this for an "EXACT SCIENCE!" The reason for such a margin is plain—THE COMPUTATIONS ARE BASED UPON HYPOTHETICAL DATA. It is considered that the most reliable method is that by the "transit of Venus." This stated in simplest language is based upon the comparison of two triangles, each having its apex at the planet, the base of the one being the line joining the two stations of observation upon earth, the other having its base upon the sun's disc. The weak points in this method are first, there is the same difficulty in finding the distance of the planet from earth, as in the case of any other



suspected by philosophers that the ocean, in any part, extends to a greater depth than fifteen, or at the utmost, twenty miles; and, as it is easy to prove, by actual experiment, that solids are not subject to this law, so we have no warrant, either in Scripture or reason, to suppose that the solid parts of the earth were ever in a fluid state.

Philosophers nevertheless have long entertained an opinion, that, in consequence of its centrifugal force, the earth has changed its figure from a sphere to an oblate spheroid, depressed at the poles; and my design in writing this essay is to show that the premises upon which they have founded this opinion, will not warrant any such conclusion.

It can hardly be necessary to go about to prove that solids are not affected by pressure in the same manner as fluids, because, if they were, a clod of earth would not stand upon a heap, but would sink down by the pressure of its own weight, in the same manner as water does; and if the earth had been originally formed in a fluid state, it could not, without changing its nature, have become solid in the course of a few days. Those therefore who hold this opinion, if they mean to be consistent, are bound to maintain that the Deity was under the necessity of creating the earth in a fluid state, in order to give it an oblate spheroidal form; and then by a subsequent miracle, which is not recorded in the works of the creation, of changing the nature of a great part of it in order to make it fit for the purpose for which it was designed; as if the all-powerful Being who created matter, could not have given it what form He pleased, without having recourse to such circuitous means. I am aware that some of our geological writers, in order to reconcile Scripture with their theories, have dexterously contrived to lengthen the days of creation by making the earth move slower upon its axis; but though this sophistry may serve for a while to prop up the system of the geologists, it will not serve the purpose here, because the earth's centrifugal force must have diminished in exact proportion with the diminution of the velocity of its motion on its axis; and as, in consequence, the loss of gravity in the equatorial parts would have been all but nugatory, the difference of the pressure in the different parts of the earth would have been too trifling to have produced any sensible effect.

The difference which has been said to be observed in the vibrations of a pendulum in different parts of the world is, I believe, the origin and groundwork of this hypothesis. It is said that a pendulum vibrates slower at the equator than it does in the temperate latitudes,\* and

\* A difference in the centrifugal force must undoubtedly be a cause of part of this effect; but I cannot help thinking that a difference in the density of the atmosphere is an equally effectual cause; and I am persuaded that if any one who has the opportunity could count the vibrations of a pendulum in a lighthouse, where the air is highly rarified, he would find that it would vibrate nearly as slow as it does at the equator.

the Newtonian philosophers account for this by supposing that the equatorial parts are removed farther from the centre, where gravity must necessarily be diminished, while the gravity of the poles, by being brought so much nearer the centre, must be proportionably increased. Surely any thinking man who heard this argument, would naturally infer that these philosophers believed that the power of attraction resided in some substance which was fixed in the earth's centre; but no such idea was ever entertained by them. According to them, all matter mutually attracts, and with equal power; and yet they maintain that the mere circumstances of being removed further from the earth's centre, *by an accumulation of matter*, will diminish the gravity of the equatorial parts, although the power of attraction in the centre is not stronger than it is in those substances with which they are immediately in contact.

In what way do these philosophers account for all substances in a sphere gravitating towards its centre? Not because the power of attraction is fixed in the centre, for this they will not allow; but because there is a greater quantity of matter, and consequently a greater power of attraction in that direction than in any other; and upon this principle, an accumulation of matter in the equatorial parts, and a diminution of matter in the polar axis, ought to increase the gravity of the equator and diminish the gravity of the poles. The very groundwork of their hypothesis is, that, in consequence of the centrifugal force taking off a portion of the gravity of the equatorial parts, there must necessarily be a sinking of the poles and an elevation of the equator in order to restore the equilibrium; and surely, when the equilibrium is restored, the gravity of all parts of the earth ought to be the same, so that, unless it can be shown that the difference in the vibrations of a pendulum is produced by a difference in the state of the atmosphere, this very difference is *a demonstrative proof that the earth has not changed its figure*; and consequently is a direct confutation of this hypothesis.

If we may credit the newspaper reports, Capt. Sabine is at this moment (May 1823) employed in measuring the vibrations of a pendulum in different parts of the world, in order to furnish philosophers with *the necessary data to enable them to ascertain the true figure of the earth*; and I should be glad to learn, from any of these philosophers, in what way they propose to distinguish between the effect, on the vibration of a pendulum produced by a difference in the centrifugal force, and that which they *suppose* is occasioned by a change in the earth's figure? The only way by which we can possibly ascertain the quantum of the centrifugal force, as compared with the power of the earth's attraction is by observing the difference in the vibrations of a pendulum in different parts of the world; and when two causes are

mixed together, both of which are supposed to produce precisely similar effects, though in different degree, I cannot imagine how it can be possible to distinguish between the effects produced by each. The question concerning the earth's figure was formerly considered of such importance, that it was thought advisable by the French Government to send two companies of philosophers to measure the length of two degrees of latitude, one at the equator, and the other under the arctic circle, and it appears by the reports of these philosophers that a degree of latitude near the pole is longer than a degree of latitude at the equator.

From these data the Newtonian philosophers have drawn conclusions which they consider as incontestibly proving that their hypothesis is true; but unfortunately, in coming to these conclusions, they have completely lost sight of what ought to be esteemed one of the main props of their philosophy, namely, a central attraction; for if they will but allow that all bodies gravitate towards that point in which direction there is the greatest quantity of matter, they will immediately perceive the necessity of supposing, with St. Pierre, that the earth must be an oblong spheroid lengthened at the poles, and not an oblate spheroid that is flattened at the poles.

If the earth had been a sphere, it is clear that the length of a degree of latitude would have been the same all over the world, because, in that case, equal angles, drawn from the centre, would always mark equal distances on the circumference; and if the earth had subsequently become depressed at the poles and elevated at the equator, the distance of any one point from the nearest pole would have been considerably lessened, whilst its distance from the equator would have been proportionably increased; so that, if the earth had been an oblate spheroid depressed at the poles, the length of a degree of latitude at the poles would have been less than it is at the equator, and not greater, as appears now to be the case.

\*At least upon the principle adopted by the Newtonians. that the elevation of the equator is equal to the depression of the poles.

*To be concluded in our next.*

#### EDITORIAL NOTICES.

The following is added to our list of publications, and can be had from the Secretary.

The "Herald of Glad Tidings," 1d.

At the request of several friends we desire to say that Photographs of the Secretary can be had, 1/1; Cabinet size, 1/7, post free.

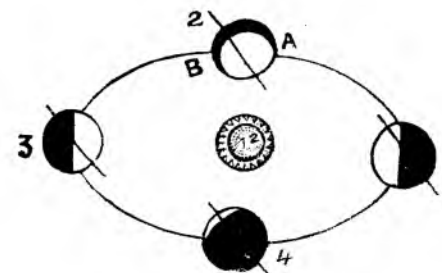
N.B.—The Secretary will be glad to receive Subscriptions *now due*.

### A POSER FOR NEWTONIANS.

Works on Newtonian astronomy tell us that the planets, including our earth, revolve round the sun and also rotate on their axes from west to east, or from right to left.

The earth then, according to this theory, turns on its axis from west to east and revolves round the sun in the same direction.

Let the following diagram illustrate this:—



Nos. 1, 2, 3, 4, the earth travelling in its orbit around S the sun. The earth is said to turn on its axis from right to left or from west to east: that is, from A to B, (No. 2).

It also revolves round the sun from right to left: that is, from 2 to 3. Since the sun is seen to rise in the east and set in the west, it travels, as viewed in this country, from *left to right*.

As the earth is supposed to rotate like a top in the direction from A to B, an inhabitant on the other side of the "globe" could not see the sun until the earth turned round and brought him to A. He would then, from his position at A, see the sun *rising on his right*, that is, *in the west*; for, as we look at the sun, the west is on our right.

How is this, then? We know the sun rises in the *east*, that is, *on our left*; but according to the Newtonian theory, as illustrated by their own diagram, the sun *rises in the west and sets in the east*.

Surely this is a poser for Newtonians. Who among them can explain this contradictory theory?

BETA.

### A PROFESSOR'S VIEW OF HIS OWN TEACHING.

"The student of science will do well to bear in mind the words of a very eminent lecturer of physiology." The statements I have made to you gentlemen I have every reason to believe to be wholly untrue, but you must learn them, because if you do not, you will not be able to pass your examinations." *The Engineer*, Oct., 12th, 1894. Query. Is the father of lies, the father of the *so-called* sciences?

## The Contents of our Letter Box.

CAPETOWN. Dear Sir,—I am very pleased to hear from you and thank you for papers sent. I may say that I have always questioned some of the teachings of astronomers but had not the means at hand to support any objection I wished to make. Now, however, the case is altered and I can see very clearly that a "plane" earth and that alone is compatible with Bible teaching. I am especially thankful that the means of proof are now within the reach of every man who knows the multiplication table and uses his eyesight—that precious, though abused, God-given sense. What puzzles me more than everything else is that common sense people have been so deluded as to believe in the fearful monstrosity that the earth is a whirling ball! I went to a lecture here a few weeks ago, by a gentleman from the Royal Observatory (near here). His advertised address was on "Glimpses of the Solar System," illustrated by limelight views. He said he had had a good deal to do with astronomy, having been employed at Greenwich when a boy in connection with the Royal Observatory there. Well, this "authoritative" lecture amused me most of all for the "blind credulity" it manifested the audience to be possessed of. I simply smiled and sometimes laughed at what I plainly saw were mere suppositions. The lecturer fairly knocked the legs off his own theories by saying, "we may ASSUME." "we may SUPPOSE," &c. He said, "the accepted theory of astronomy is true, at least, WE ASSUME IT TO BE TRUE!" I just laughed outright at such "science." Well, the learned man went on, being considerably helped by the pictures. He said there were places on the moon which appeared to be the same as old craters on the tops of volcanoes, and showed a few of them. "How wonderful!" an old lady behind me kept repeating. The next picture shown was a volcano with lots of smoke issuing from its summit. The man of figures paused just long enough to give his audience time to hold their breath at see-

ing a picture of an actual volcano on the moon—and then said that the volcano of the picture was not on the moon—it was Vesuvius! Well, well, the chagrin and disappointment caused by that statement plainly made it evident that—so far as I could see—everybody but myself believed the volcano to be on the moon's surface! This serves to show the gullibility of human nature. The man of figures quietly smiled (at his dupes. I should think so! But at a flat earth man, these men of figures never smile. ED. E. R.)

During the lecture he referred to the "flat earth" people, and said that until they could do what astronomers had done (*we* some spots on the sun) they would have to be silent! Wonderful! exclaimed the lady behind me.

After the lecture I wrote to the learned man and said, I was sorry he made reference to the "flat earth" people without giving them a chance of replying, and that if he would take the affirmative in the proposition "that the earth is a revolving globe," I would gladly take the negative on the same platform as his lecture was delivered. In his reply, he said (*inter alia*), "I have neither the ambition nor the leisure to join in such a discussion as you suggest, especially as from previous experience I well know its uselessness." Such a debate would have fairly roused Capetown, but, of course, a good situation is not to be so easily thrown away. If I had been allowed to ask a few questions at the lecture, I think one or two would have taken as long to answer as it would take a "science lecturer" to walk to his 93,000,000-of-miles-away-sun.

Being an amateur navigator I am much interested in the truth of the earth's planarity and would much like to get a chart on the natural principle if there are any to be had. I am at present living right east of Table Mountain, and therefore cannot determine where the Southern Cross sets; but should I go to live in the

city I shall have great pleasure in observing it and reporting to you.

Now I must close, wishing you God speed in the propagation of truth.

Sincerely yours,  
T. W.

Sir,—The idea of the universe presented by "Parallax" has long seemed to me to be deficient in many respects; there is lacking about it a definiteness of conception necessary to forcible elucidation, and on the whole, he did not formulate a system of astronomy, but of geography and cosmography of the earth. I accept the basis of the earth's flatness and his general view concerning the motion of the sun and moon; but concerning the motions of the southern stars, his views are failing sadly to account for them. These austral phenomena have led me to *reconstruct the system in accordance with facts*, and in accounting for the phenomena of the south I believe I have been successful—the eclectic system incorporates the facts of phenomena south of the equator and *relies upon the "circumpolar motion" of the southern stars, in connection with the earth's flatness, as a demonstrated premise.*

The scriptural "firmament" enshering the world or universe, assists in solving the question. You know some of our Zetetic friends advocate a solid shell arched overhead. If above as a canopy, it is beneath as a concavity, as the hollow of his hand, holding and sustaining the waters of the great deep. Parallax intimates that water is eternal in horizontal directions, with fire underneath and an infinity of space above. He gives no definite conclusion as to what the waters rest upon—a ponderable fluid, susceptible to evaporation in the presence of heat; neither does he offer any reason why the air left uninclosed may not be quickly attenuated into space. Questions have arisen as to whether the views of Parallax are sufficient to account for a system of the world having *mutual adaptation one part*

*with another.* In connection with this, if the sun is a ponderable body, by what is it supported and by what power does it make its circuit in 24 hours, and what causes it when on the southern tropic, the circumference of which is nearly twice the circumference of the northern tropic, to revolve in just the same time as when on the northern tropics. How can it travel *twice* the distance in December that it does in June in the same time? Then the question of the sun's fuel arises. If the visible sun is an independent body what supplies it with fuel? Must we not, by law of logic, conclude that the sun receives forces and fuel in proportion as it *emits* light and heat?

These thoughts, in connection with a study of alchemism, have led me to the conclusion that shape and form are necessary to existence, and that the universe has centre and circumference, and **INSIDE** of which circumference are generated alchemic, magnetic and electric forces, and in the universe there is no diminution, but, on the contrary, a conservation of cosmical forces. By law of generation, the forces, substantial as they are, would be made lighter than the concretions by which they are generated, and by equilibrium would rise perpendicularly as far as limited space would permit. This limit is the top of the firmamental reflector, from whence they are reflected to a focus at half the radius of the hollow sphere. Meeting at this focal point combustion occurs. This transmutation would engender for a given radius about the focal point a region of hydro-aboron, or first-gas, and through it reflect or transmit forces of heat and light. Where there is reflection of brightness there must of necessity be a *corresponding reflex* of that reflection, and hence a dark hemisphere of the central sun. The *law* that causes the reflection of light and its reflex would also cause it to revolve or rotate slowly. This principle is thoroughly exhibited in the vacuum instrument called the radiometer. The light and heat of the central sun is *refocalized* upon the earth's air within 2,000 miles of the earth's surface; from



this refocalization (the visible sun), light and heat are radiated downwards and outwards. The earth absorbs this substantial vitality and transforms it by use into other qualities of the same forces, which are levitated again, transmitted, and returned to the earth as before. Thus, in the constant circulation of the forces of this great universe of life, there is no waste and no loss of cosmical forces. The connection of the visible sun with the central explains its constant daily revolution in exactly the same time over circumferences having different diameters.

But you ask me for proofs concerning the central sun. I answer it is found in the phenomena of the south. The circle around the central sun in my diagram of the universe, represents the limit of ether or hydro-aboron. At the circumference of this sphere all around is situated the *Primary Stellar System*, from which the stars as we see them are *projected upon the air* like a great dissolving view. Polaris is situated at the *bottom* of the sphere, directly over its secondary that we see. Sigma Octantis is situated at the *top* of the sphere, and the sphere rotates once in 24 hours, while the inner sun rotates and throws its projection around in 23 hours, 56 minutes and 4 seconds. The "poles" of the aboron sphere are the Primary Polaris and Sigma Octantis. Hence, the phenomena of the stars north and south are explained by resolving the matter into the following:—

Looking north we see Polaris; it is central—all eyes looking north and seeing the same star above the CENTRE of the earth, proves that the star is central. The stars about it have a "circumpolar" motion, continuing to the equator. The earth being a plane, the *south is a circumference*. The stars near the centre of the "circumpolar motion" are seen at *all times* of the night, in the southern regions, in every direction looking south. The same stars are recognizable by constellations, and the *circumpolar view obtained from every southern point*. If from New Zealand, one would be looking in an op-

*posite direction* from the southern point of Africa; if from South America, opposite from western Australia. What is *proven* by this *multitude of views of the same things, looking south from every southern point of longitude*? I can zetetically solve it. If, by looking north we see Polaris, and it is proven *central* by being in the zenith of the earth's centre, *so looking south from every southern point of longitude we see the same constellations*. *proves the view circumferential*, which could only result from REFLECTION FROM A CENTRAL POINT, and that central point is the top of the primary stellar system. This would bring the stars into *harmonious revolution*, with projections upon the elements beneath, the outer projections from the top of the aboron sphere being reflections against the circumferential firmament and from thence reflected downward upon the southern ærial regions. I am able to demonstrate this by a series of mirrors—a *zetetic proof*. And this affords an explanation of austral phenomena in accordance with the requirements of Parallax, "to observe and record the motions of the well known southern constellation, not in relation to a *supposed south polar star, but to the meridian and latitude of each position*." And thus, in accordance with your view, *motions of light* are not identical with the *bodies emitting the light*. But here, allow me to note, that those stars in the south that have apparent "circumpolar motion," passing a given meridian *twice in twenty-four hours*, in their *superior and inferior culminations*, could not at the same time be making their great circumferential orbit of 36,000 to 50,000 miles. So I believe I, too, have made a *discovery*, relating to the behaviour and motion of light, as it comes down from above and passes through the atmosphere, a medium of ever-increasing density.

We cannot see beyond the limit of the air or atmosphere (not atmosphere). I can demonstrate this to any one who will descend with me into a body of clear water. Objects and light within the water can be discerned plainly, but nothing can be seen

above the water. This has been the experience of divers into the sea; reeds, ship masts, &c., protruding through the water and above the surface could be seen only to the surface but no farther. Light, as light, is confined to the air, and the visible sun, moon and stars are all within the air, and none higher than 2,000 miles. By zetetic proof we evolve the following: We cannot see out of a given medium into a lighter one, as from water into air; hence, we cannot see beyond the air's surface. We see the visible sun; by plane triangulation it is proven to be 2,000 miles from the earth's surface; it is within the air, or at the top of the upper stratum; hence air extends upward 2,000 miles.

Other distinctives of the eclectic system I could present, such as the moon's phases, and the full moon being seen in northern and southern latitudes at the same time; the solar system, the planets, &c., but time forbids until a future time. In the meantime I shall be glad to have from you an exchange of views concerning austral phenomena. If there are points in this letter you would like to publish in connection with my name or system, you may do so.

ULYSSES G. MORROW.

BIRMINGHAM. I like the new series of the Review No. very much, especially the cover, and all who have seen the latter agree with me that it is a great improvement.

J. N.

LONDON. Dear Mr. Editor,—Having carefully read through the new number of the *Earth Review*, the conclusion arrived at is, that it will require a great deal of beating. The cover at first struck me as rather a risky departure, (I'm rather a stickler for original book covers) but after having had the matter pointed out and weighing it carefully, I'm inclined to think with others, that many will be more inclined to scan, and perhaps digest, the contents now, than they were when the work was presented in its more scientific looking jacket, as appearance at first sight very often has the effect of scaring timid inquirers who jump to the conclusion that the contents will partake of the dry-as-dust order of literature. If *thinkers* can be induced to just glance, by the aid of the rosy cover, that glance may lead to a fixed look at the matter inside, and so be led to further investigate the subject which this *strange body of individuals* calling themselves Zetetics or Planeists wish to bring clearly before them, thus giving solid and lasting information on their part, and thereby strengthening the bundle of rods which will at some future time beat the chaff of modern theoretical science to powder. Wishing you success,

I remain yours faithfully,

D'ARCHY ADAMS.

### The Zetetic's Open Column.

The questions in this column are open for Zetetics to reply to.

Questions unanswered, No. 2.

QUESTION (3). "Anaxagoras said, that, lower than the moon, and between it and the earth, there move yet other dark bodies which may occasion eclipses of the moon." May they not be the cause of an eclipse of the sun? What practical proof has ever been given, that the moon coming between the earth and sun is the cause of an eclipse of the sun? T. H. HOWES.

QUESTION (4). WHY is it, that the horizon is exactly level with the eye whether from the deck of a ship, an elevated position on land, or from the car of a balloon? JAMES GRAY.

## Answers to Correspondents.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o Mr. J. WILLIAMS,  
32, Bankside, LONDON, S.E.

W. M. RUNCIMAN asks, "What do you think of Mr. Gillespie's Theory?" It reminds us of the young rascal who *stole* another boy's box of bricks to build a house with. Mr. Gillespie has taken the rotating globe, the fixed sun, and other essential globe-spinning accompaniments to elaborate a system of his own, and calls it "The True System of the Universe;" but what about the system from which he has taken the essentials to build his system with? Of that system he says:—"It is one of the most glaring and degraded falsehoods ever laid before mankind," (p. 6). "A heathen system . . . as false as the blackest lie ever brought into existence," (p. 66). Now if the present system of Modern Astronomy is "one of the most *arrant, degraded, and debased lies* that the devil himself could ever have invented," (p. 66), what is Mr. Gillespie's system which is based upon the primary hypothesis of that system? "Do we think that this system is the *ONLY* theory which agrees with both Bible and Stern Science?" No. It does not agree with either, but contradicts both. Stern science has its basis in *practical facts*. Mr. G.'s system as we have seen, is based in the Pythagorean "idiot system," and therefore has neither part nor lot in the Science of Scripture. For instance, the Bible teaches that the sun returned ten degrees in the sun-dial of Ahaz. Now if this is true, Mr. G.'s theory is *utterly false*. Mr. G.'s theory is, "the sun is *stationary* in space." God says, "the sun returned," therefore the sun is *NOT stationary* in space," but rules the day by its God appointed movements in "stationary in space," the earth. If Mr. G.'s theory "agrees with Stern Science and the Bible," that passage ought to read somewhat as follows:—"The sea-earth-globe returned ten degrees backward before the fixed sun as shown by the earth-dial of Ahaz." Joshua commanding the sun (not the globe) to stand still, should be sufficient proof to Mr. G., that his theory is *ABSOLUTELY FALSE*. No wonder that he does not claim to be "a clear expounder." Professor Huxley says, "the cosmogony of the semi-barbarous Hebrew is the incubus of the philosopher, and the opprobrium of the orthodox." That at least is manly as defining his actual position, but for any man to assert the truth of the Scriptures and yet to contradict them by a system of so-called Science, is neither manly nor Christian, but absolute folly. We respect Mr. G. and endorse many of his statements respecting the system of modern theoretical astronomy, but the system which he has elaborated we are against, because it is absolutely false to every fact in Nature, and every statement in Scripture respecting Nature. This is proven by the fact that he contradicts himself! On page 7 he says, the sun is *fixed* in space, but on page 16 you will find him showing "the orbit line of the sun!" An "orbit line" is "the path described by a heavenly body," that body must *move* to describe its orbit, and therefore cannot be "*fixed* in space." In the face of this contradiction and his bare assertions, what is the value of the "opinions of the Press, and Extracts from letters of Eminent Men and others?" Why, they are not worth the paper they are written upon! P.S.—Our columns are open to Prof. Huxley if he cares to prove his assertions, and we will show him who it is that will be "forced to retire from the lists, bleeding and crushed, if not annihilated."—Vide *Echo*, Oct., 29th, 1894.

THE  
EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

No. 3 (NEW SERIES).

APRIL, 1895.

PRICE 2D.

ZETETIC REFRACTION.

*By James Naylor.*

The bearing of refraction upon both celestial and terrestrial phenomena, is too well known to need emphasizing. It matters not whether we wish to approximate the size or the distance of some heavenly body, or fairly to localize some distant object on earth, refraction, as the late Professor Ding said, "baulks us at every turn;" yet this circumstance should not hinder us from an attempt to solve existing difficulties, but should rather spur us on to renewed energy. It may be that the difficulties are only of our own creating, or arise from some imperfect or insufficient generalization. If so, then of course we cannot hope for success. Let us then, casting aside all pre-conceived notions, endeavour to Zetetically meet with a solution, that shall be in all respects satisfactory, and also harmonize with the whole of the ascertained facts.

That light is a force is practically self-evident, for setting aside the many evidences that could be set forth in proof, the experience of every person who has suddenly come from a darkened into a brilliantly lighted room is sufficient testimony.

We start then with light as a force, and whatever may be our theories as to its method of propagation, whether corpuscular or undulatory, we may be sure that light as a force will conform to the known laws which accompany the transmission of forces. Now of these laws, there is none so certain as that all forces turn in the direction of the least resistance. Upon this fundamental premiss the whole laws of Dynamic securely rest, and we feel assured that in watching the

## Answers to Correspondents.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed, The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o Mr. J. WILLIAMS,  
32, Bankside, LONDON, S.E.

W. M. RUNCIMAN asks, "What do you think of Mr. Gillespie's Theory?" It reminds us of the young rascal who *stole* another boy's box of bricks to build a house with. Mr. Gillespie has taken the rotating globe, the fixed sun, and other essential globe-spinning accompaniments to elaborate a system of his own, and calls it "The True System of the Universe;" but what about the system from which he has taken the essentials to build his system with? Of that system he says:—"It is one of the most glaring and degraded falsehoods ever laid before mankind," (p. 6). "A heathen system . . . as false as the blackest lie ever brought into existence," (p. 66). Now if the present system of Modern Astronomy is "one of the most *arrant, degraded, and debased* lies that the devil himself could ever have invented," (p. 66), what is Mr. Gillespie's system which is based upon the primary hypothesis of that system? "Do we think that this system is the "ONLY theory which agrees with both Bible and Stern Science?" No. It does not agree with either, but contradicts both. Stern science has its basis in *practical facts*. Mr. G.'s system as we have seen, is based in the Pythagorean "idiot system," and therefore has neither part nor lot in the Science of Scripture. For instance, the Bible teaches that the sun returned ten degrees in the sun-dial of Ahaz. Now if this is true, Mr. G.'s theory is *utterly false*. Mr. G.'s theory is, "the sun is *stationary* in space." God says, "the *sun returned*," therefore the sun is NOT "stationary in space," but rules the day by its God appointed movements in the heavens, over a stationary dial plate, the earth. If Mr. G.'s theory "agrees with Stern Science and the Bible," that passage ought to read somewhat as follows:—"The sea-earth-globe returned ten degrees backward before the fixed sun as shown by the earth-dial of Ahaz." Joshua commanding the sun (not the globe) to stand still, should be sufficient proof to Mr. G., that his theory is ABSOLUTELY FALSE. No wonder that he does not claim to be "a clear expounder." Professor Huxley says, "the cosmogony of the semi-barbarous Hebrew is the incubus of the philosopher, and the opprobrium of the orthodox." That at least is manly as defining his actual position, but for any man to assert the truth of the Scriptures and yet to contradict them by a system of so-called Science, is neither manly nor Christian, but absolute folly. We respect Mr. G. and endorse many of his statements respecting the system of modern theoretical astronomy, but the system which he has elaborated we are against, because it is absolutely false to every fact in Nature, and every statement in Scripture respecting Nature. This is proven by the fact that he contradicts himself! On page 7 he says, the sun is *fixed* in space, but on page 16 you will find him showing "the orbit line of the sun!" An "orbit line" is "the path described by a heavenly body," that body must *move* to describe its orbit, and therefore cannot be "*fixed* in space." In the face of this contradiction and his bare assertions, what is the value of the "opinions of the Press, and Extracts from letters of Eminent Men and others?" Why, they are not worth the paper they are written upon! P.S.—Our columns are open to Prof. Huxley if he cares to prove his assertions, and we will show him who it is that will be "forced to retire from the lists, bleeding and crushed, if not annihilated."—Vide *Echo*, Oct., 29th, 1894.

THE  
EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

No. 3 (NEW SERIES).

APRIL, 1895.

PRICE 2D.

ZETETIC REFRACTION.

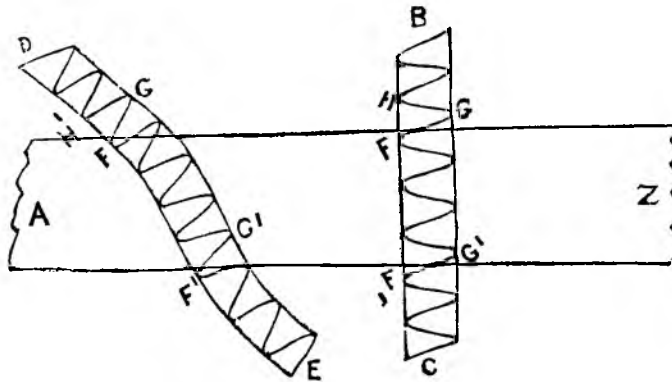
*By James Naylor.*

The bearing of refraction upon both celestial and terrestrial phenomena, is too well known to need emphasizing. It matters not whether we wish to approximate the size or the distance of some heavenly body, or fairly to localize some distant object on earth, refraction, as the late Professor Ding said, "baulks us at every turn;" yet this circumstance should not hinder us from an attempt to solve existing difficulties, but should rather spur us on to renewed energy. It may be that the difficulties are only of our own creating, or arise from some imperfect or insufficient generalization. If so, then of course we cannot hope for success. Let us then, casting aside all pre-conceived notions, endeavour to Zetetically meet with a solution, that shall be in all respects satisfactory, and also harmonize with the whole of the ascertained facts.

That light is a force is practically self-evident, for setting aside the many evidences that could be set forth in proof, the experience of every person who has suddenly come from a darkened into a brilliantly lighted room is sufficient testimony.

We start then with light as a force, and whatever may be our theories as to its method of propagation, whether corpuscular or undulatory, we may be sure that light as a force will conform to the known laws which accompany the transmission of forces. Now of these laws, there is none so certain as that all forces turn in the direction of the least resistance. Upon this fundamental premiss the whole laws of Dynamic securely rest, and we feel assured that in watching the

effect of this law upon the motion of light, we shall see our road to success. For instance, let us take a piece of glass where we know that a ray of light striking the surface obliquely, will be refracted in what is termed the direction of the vertical. Now this statement is far too empirical to be satisfactory. It merely expresses the relationship of refraction to the vertical, but tells us nothing as to WHY refraction takes place. The statement is indeed a parallel to that of the old philosophers, who explained the rising of water in a pump, as due to the circumstance that "nature abhorred a vacuum." And yet the cause of the refraction is self-evident, if we will but examine more closely, and is due to the fact, that light as a force, turns in the direction of the least resistance. We will illustrate this point, and take for our purpose, the undulatory hypothesis as the mode in which light is propagated.



Let A Z represent a plate of glass upon which two rays of light are impinging, one (B C) direct, and the other (D E) oblique. Now we know that the progress of light is hindered when passing from one medium into another, which is more compact or homogenous, as for instance, from air into glass. Indeed the plate A Z might be increased in thickness to such an extent as to prevent the passage of light altogether. Such being the case, it is evident that each successive undulation will be unequally hindered as it reaches the glass, thus causing portions of the light to move with unequal velocity, and create in the ray a tendency to move from its parts and along the line of least resistance. For instance, the undulation F G in the direct ray B C, is hindered more at the F side of the ray when F first enters the glass, than at the G side, which is still moving in air. The latter therefore moves more rapidly than the former, and in the meantime describes part of a circle, of which F may be considered the centre.

This gives to the ray for the time being a change of direction along the line of least resistance. As, however, the same process takes place with the next undulation G H, when the G enters the glass, only in the opposite direction, there is a regular compensation established which enables the direct ray of light B C, to pass through the glass without change of path, and only with a diminished rate of movement. But with the oblique ray D E, the case is totally different. There we shall find that every undulation is always hindered on the same side of the ray, and consequently gives to it a permanent bias from the paths it has been previously describing. To illustrate this, we note that the undulation F G in the oblique ray, would evidently be first hindered at the F side of the ray, the same as in the former case. But so would the next undulation G H, and every succeeding undulation also. As a consequence the oblique ray is constantly turning from its path along a curve, of which F, as in the previous case, may be considered the centre. In other words, while in the direct ray, the point of hindrance is alternately on the F & G side of the ray, in the oblique ray, the point of hindrance is always on the F side, causing a permanent change of direction towards what current teaching calls the "vertical," but which, to speak more accurately, is along the line of least resistance.

Having thus seen why a ray of light refracts on entering obliquely into a dense from a rarer medium, let us now proceed to note its behaviour under the opposite conditions, viz., on emerging from a dense medium, into one less compact or homogenous. We will at present leave in abeyance the behaviour of the ray, on passing obliquely through a medium of equal density. Let us turn again to the supposed plate of glass A Z, and note the undulation F G, in the direct ray B C. Now here we see the F end is moving in air, while the G end is still subject to the greater resistance of the glass. There will consequently be a tendency in the F end to turn along a curve of which G is the centre, or, to use current language, a movement is made in the direction of the horizontal. However, when G emerges from the glass into the air, the same as F, there is the same tendency, only in the opposite direction, and there is manifestly therefore, no departure from its original path by a direct ray, either on entering or leaving a relatively denser medium. But not so with the oblique ray D E. There, not only is the F end of undulation F G moving in air before the opposite end G, but also the corresponding end to F in the next, and every succeeding undulation, causing all of them to move along a curve, of which the end of the undulation in the glass may be considered as the constant centre.

We have hitherto assumed the undulatory theory as to the propagation of light, but it makes no difference to our argument if we sup-

pose the emission or corpuscular theory (or indeed any other) to be the correct one. In the theory of emission it simply means, that in an oblique, the atoms or corpuscles of which it is composed, are resisted more on one side than the other of the ray, and must therefore of necessity obey the law which compels all unequally balanced forces to move in a direction of a resultant of all other forces acting upon them.

Again our conclusion is not vitiated if we call to mind that the length of an undulation is very small. We are not concerned with the whole length of an undulation, but with the total number composing the ray. To simplify our statement, we have only taken one undulation, and the shorter this is, then the more there are in the total area of the ray. All the difference is, that some undulations will be more resisted than others, but the effect still remains the same.

It will be noted that the greater the obliquity of the ray, so much the greater will be the deflection from a given course. If the original path be near to the vertical, then there will be little or no refraction, but if it be near to the horizontal then the refraction will become very great, because the amount of force that is unbalanced is greatest. This accords perfectly with the facts, and corroborates our conclusion; that the refraction of light, when passing obliquely through different mediæ, is in obedience to the law of all forces, viz., moving along the line of least resistance.

Instead of the conventional teaching, viz., that light when entering obliquely a dense medium, refracts to the vertical, and when entering a rare one, it refracts to the horizontal, we may state our conclusions up to now, in words somewhat as follows: *Light, when obliquely entering media of different density, is unequally acted upon by them, and turns in the direction of the least resistance.*

Up to the present, we have simply pointed out a tangible and self-evident cause for the refraction of light, when obliquely entering different media, and have not disproved, but rather confirmed, existing teaching. In future papers we hope to show that the operation of this law of least resistance, in other directions, is not only destructive of some prominent astronomical opinions, but also a demolisher of certain havens of refuge, into which the revolving-globe believer too readily betakes himself.

*To be continued.*

#### ROUND OR FLAT IN 1895?

"Arrah, thin, Pat, do yez raily think the wor-r-ld is as round as that?"—pointing to a globe. "Av coorse I do!" "Thin phwat I can't get t'rough my skull is phwy the folks on the unther soide don't fall down into shpace." "Yez make me toired!" "Well, but phwy is it, I ax yez?" "Phwy, man aloive, heaven has given thim common sinse, an' they simply howld on!"

## A COMING GENIUS ON THE GLOBE.

*By H. H. Scroggins.*

The globe on wich the sientifik foolosifers sa we liv, iz lik a noringe thay sa, ownly not the same culler, an thare iz worter an mud in sum plazes owtsid ware thare ort to be rine; an erth, stonz, an all sortz ov uthur things inside ware thare ort to be juse and pips; the globe iz ski-rockitin awa throo spase thay sa, at abowt 19 miles evere sekond, or 4 times kwiker than a flash ov litening moovz, besides goin-it in 3 to 6 uthur derekshons *all at the same time*; u kan chooz ow meny moshons u lik for yor-selv, az it dont mak a bit ov difrunz to Theoretikel-Sienz, an the lernid-asstronomers wont kik up a fuss with u abowt it. It iz funne no wun ever sor or even felt it moove, iksept, wen thare iz an erthquake, for then thay *do feal it*; an ow thay mak traks sharp to get away u bet. Wel thay sa that this wonderfool globe woz furst ov all oney gas or sumthing, or a tine bit orf a sun or sumthing, thare iz ene amownt ov thez sunz thay sa, an ov corse thay no, praps! an then it began to stik together sumhow, an waz pelted with meters (not gas meters) to mak it bigger; an then in the corse ov bilyuns ov yers, it got lik thik-ot stif-peace-puddon; an at larst it kooled on the owtside, but not all throo, and so formd a crust; this crust we liv on ware it iz dri enuff an we kan afford to pay wot iz kawld rent, wich iz poketed bi wot iz kawld a lan-lord hoo thinks this globe waz wurkd-up for iz pertikler benefit, an hoo wood let on lease all the ayr an worter if he kuud grab them az well. All this time this globe iz eld together with sumthing thay kall Gravy-tashon (the stikin part ov this stuf mus be in the tashon, az thare aint much stik in gravy, an (leastways not in that we bois cum akrost) this gravy-tashon woz fownd owt bi a man hoo woz sum part ov iz life (at tennerate) a bit barme, or az sum sa loone, or mad, that iz: iz name woz Izak Nootun an thay arfterwards cawld im Sur-Izak Nootun wich woz polite if nuthing elz; sinz that time thay wurshup im lik; wun thing thay dident arst im, ow he noo all abowt it, so he dident trubbel much to iksplane, iksept to sa it woz ony wun mor ov iz suppozez, an sed he found it under an appel-tree, so that iz neer enuff for this wonderfool gravy tashon wich stiks all everything on to this globe an yet nun ov us or ennothing dont feal it stik at all, iksept we git wakz (cobberlers) on owr bootz, an it aint-fare to wak us bois becorz we dont no all abowt it; if we arst owr skoolmarsters orkwurd questons ow this or that iz, thay just shut us up with Gravy-tashon or 5 or 6 yarns thay kall proofs; thez proofs, mi big Unkel sez, *are all bosh*, an kan be blown to bits enne-day bi enne-wun hoo az got the tip from the rite sorse; however, let me see, this iz wanderin from the subjic sum, as thay

sa in Ameriker, as the globe thay sa, iz 25,000 miles rownd sumware, but thay dont no ow far it is rownd wot thay kall the south pole, wot-ever and warever that iz, *an it seems az if thay dont want to neether.* This globe iz 10,000,000,000,000 tuns in wate (thare aint no od ownces) or sumthing lik that, Mister Professor Proctor sez all about it in iz book, an az he woz the gratist asstronomer on erth, ov corse he new; this jus reminds me, that this blessed globe az got 2 axes (sum sa 3) not lik we chop wood with, but sumthing elz wot thay sa this globe wurls on, or round, or sumthing; an it is a puzler to us bois ow thez axes dont git of an ware owt, or stik lik owr bike axels wen we dont greese em; an ware you wood think it wood git hottist, it iz coldist an vice-versa (thatz Latin) az we hoo ar edjukated at skool sa. Mi cuzon wot az bin to Orstralyer (that iz a lump ov grownd stikin owt ov the oshuns-sawlt-worter all upside-down) sez he dident no he woz upside-down wen he woz thare, an dident no wen the upsidedownin tok plasz; but wun ov is mates swerd he woz wunce, an allso new the globe woz wurlin wyel he woz borelin "Dunno ware e ar!" but that woz ony arfter he ad ad the biggist part ov a bottel ov wot thay kall whisky wun nite; however now, this slite degreshon aint sience ene-ow-atall; an wen the cumpass wurkd all-rite all the way thare, and wen it wos thare, my cuzon sed he rekond this globe job woz a regliar fake an reel gammon all throo, speshally arfter he ad tride to mak iz plum-bob fall up, down in that Antipodeez, az well az kaarfulle wotchin iz uther mates sperit-levels wich all wurkd rite nuff withowt enne fakement; but ov corse thooz chaps aint sientifik lik our skoolmarsters and the asstronomers, so that settells it so far. An fance ow ekstrawdinary it iz, for all evrybody an evrything, an all the worter an oshuns an ships, an evrything, az well az all the sheep, big-otels, dust-yards, cherches an publik-cowsz, az well az bois, owt-o-wurks, Bishoþs, Socialists, land-prospekters an gold-miners, an in fakt evrything in them Antipodeez all to be allwoz upside-dywn, hangin just lik dubbel-stik-farsted-flies on a seeling hed-down, an all wurlin orful, an never gittin the blud all up in thare heds or gittin flung orf into—thare! it maks yer dizzy to think ov it, let ulone do it; an yet the land-menoperlizers are bizzy dewin evrybody thay kan, an the Govinment iz umbuggin an bamboozelin the peepel, an thay ar all movin abowt, an wen thay git a charnz, cheet wun anuther (legully mind) just lik thay do over ear, wich iz neerly on top ov the globe sumtimz, let alone them az iz stikin owt orf the sidz in Africa, China, &c., cutting each others throats, &c., an all a-wurling orful; wi it is reele asstonishin, aint it? an all owing to that stuff or wotever it iz—that gravy-tashon-fakement i meen; the-wot-goez-up-must-cum-down-fackt iz humbugged abowt yer no, just to sute this foolish gravy-globey-tashon-theory i rekond.

Well this blessed globe az got oops rownd it thay sa, not same az beer-tub-oops, but ony moor suppozez to wurk in lik with the globe-suppoze, wich woz the furst suppoze, understan? well, wun ov thez suppozed oops is wled the Ekquatur an a nuther iz kawled the Ekliptik, an thez suppozed oops—wots that? jiggerd if it aint ranein! O i sharnt sa no moor abowt this bloomin subjik now, i shal go an av sum fishin in the levull-kannel, az they bite better in wet wether, but i kuud go on sain lotz moor abowt this suppozed wunderfool globe if it woz better lhen fishin, an woz not such confounded-brain-foggin-rot and gammon.

## SCIENCE'S QUARREL WITH THE BIBLE.

*Extracts from Lectures by Walter Rowton, Esq.\**

It is all very well for our philosophers to dismiss the Bible as having nothing to do with the technicalities of Science, but they have no right to take that course upon a merely superficial acquaintance with the Book they dismiss. I say "superficial acquaintance," for hitherto our men of science have shewn only that. Which of them at any time has learnedly grappled with the Bible case? The frequent assertion, "There is no case to grapple with," simply proves my point; our men of theoretical science are not accomplished on that side of the subject, or they could not say so. Not one of them apparently has studied the Book with anything like method. Grotesque explanations of isolated texts to square them with their theories they obviously oppose—these are plentiful enough; but exhaustive treatises in refutation of Bible Science as a systematic whole—where are they? The subjects upon which the Bible is said to speak incorrectly are four: The First Great Cause—the Origin of Man—Geology—Astronomy. Upon these, it is confidently affirmed that the Bible records are but traditional beliefs. But these four resolve themselves into one; for if the Cosmogony of the Bible, or Origin of the Universe, be true, the great pivot principle upon which turn the Philosopher's First Cause, Darwinism, the "periods" of Geology, and the elaborate calculations of Astronomy, collapses like a burst soap-bubble.

This, of course, is very startling, and we may well pause ere we recommit ourselves to the truth of the Bible Cosmogony. I say *re*-commit ourselves, for long ago, in deference to statements of the then scientific philosophers, that Cosmogony was virtually given up; and before reverting to it, not alone have we to dispose of Kepler's and Galileo's and Copernicus's stated facts, consolidated by the speculations of Newton, Herschel, Tyndall and Proctor, but also we have

\*These Lectures (out of print) were published in 1876.—ED. E. R.



to take into account the formidable difficulties, owing to the ways in which we stand pledged, of making a recantation. We are committed to Astronomy at variance with the Scriptures: we have surrendered more than Bible dates at the bidding of the Geologists: the theories of Herbert Spencer and Darwin have myriads of adherents amongst the cleverest and most influential of the age's teachers and leaders: and a recoil from these latest and loftiest results of human reasoning and observation upon the old Bible Cosmogony, looks such a relapse from the zenith of civilization into almost aboriginal barbarism, that we may well hesitate ere consenting it should occur.

But here it is proper we should look for a little at the drift of those technical teachings which from time immemorial to this time have impugned the scientific accuracy of the Bible.

The most eminent living representative of the heathen philosophers, and at the same time the most honoured spokesman in the name of Science that England possesses, recently said—and his words, reproduced by all our newspapers, have been the well-learned Science lesson of millions since: "Abandoning all disguise, the confession I feel bound to make is, that I prolong the vision backward across the boundary of the experimental evidence, and discern in that matter, which we in our ignorance have hitherto covered with opprobrium, the promise and potency of every form and quality of life." And again: "All religious theories, schemes, and systems which embrace notions of comogony, or which otherwise reach into its domain, must, in so far as they do this, submit to the control of Science, and relinquish all thought of controlling it."

This, of course, embraces the Bible Cosmogony, it therefore, must submit to the control of such principles as these. By that which calls itself Science, we are authoritatively directed to give up believing in the personal Creator of the Scriptures: to own only a possible First Cause: to accept the heathen atomic theory: and to discern in "matter—the promise and potency of every form and quality of life;" which, if there be a God, inevitably includes the life of God Himself. That the heavens declare the glory of God; that the firmament showeth his handiwork; that God made man; that Creation, as biblically described took place, nay, that Creation as a special work occurred at all: all this we are summoned to surrender. And for what? For the dear sake of a materialism which, when we fail—for aught that has ever been taught us to the contrary—shall receive us into as good as everlasting nothingness! "Survival of the fittest"—a blessed hope truly! for, as their times come, "the fittest" die as unavoidably as others. Everlasting dust and ashes, that appears our promised end; and who but is speeding towards it? As in this

life there is vastly more pain than pleasure, if there be indeed no afterwards, no day of reckoning, why does not science recommend suicide? Depriving us of our Bible hope, and giving us none other—by all means everlasting dust and ashes; and the sooner the better. Science has no right to devise schemes for prolonging life; with her views, it is the refinement of cruelty.

"But it is not Science's business," I am reminded, "to do more than delay our arrival at mother earth; at the grave's mouth her duties cease. To provide for the Afterwards is Faith's work." Yes; and to enable Faith to do it well—she invalidates her Bible! "Oh, but she means not to invalidate the Bible's faith: she only invalidates its science." Nay, but these are inseparable: the Bible science is the Bible faith's platform: they stand or fall together. Does that require proof? it shall have proof, overwhelming proof in my next lecture.

Meantime, let me show you that modern science really does her utmost to invalidate the Bible *Faith*.

With reference to modern astronomy, *The Daily Telegraph*, July 6th, 1875, says:—"Nothing has so changed the *beliefs* of society as the discoveries of astronomy;" and after naming approvingly our larger conceptions and widened theologies, it adds the amazing revelation that "All the ancient theologies were constructed upon the *Ptolemæan* notion that the earth was the centre of the universe, and that the sun, moon, and stars were hung in the void to lighten it, and for signs and seasons." With Claudius Ptolemy therefore, born Anno Domini 70, originated this, the Genesis Cosmogony! Did not I rightly say, that in the cases of scientific men theological knowledge was not equal to technical? But what is the drift of this anachronism? Evidently to impute to one of ourselves the scientific teaching of the Scriptures, and so to destroy veneration for it.

The modern astronomy, beginning as a system with Galileo, together with "the moral sense in man," according to the *Telegraph*, "really furnish the foundations of a *natural religion*, to the vast and imperative demands of which the official teachers of dogma must *advance*." "All theories of Revelation and Divine Government," it continues, "have, since the discoveries more especially of Newton, had more or less to adapt themselves to the ideas of modern astronomy," by which, so to speak, "the breath of theology has been taken away." So you see the Bible is not considered an *actual* Revelation, but only a *theory* of Revelation, with a mortal breath, "which has been taken away." In effect dead, if its sentence is to be revoked, it must worship science. Its teaching is so inferior to "natural religion" based upon modern astronomy and moral intuitions, that instead of natural religion advancing to Revelation, it is *our theory*

of Revelation which must advance to natural religion.

"Not," adds the *Telegraph*, "until the professors of theology address themselves in earnest to the vastly larger demands which the minds of men now make for DOCTRINES *commensurate with scientific teaching*, will religion and morality come up abreast of astronomical truth." So far from the Bible being the one truth-test to explode all error, now it is modern astronomy which is the truth; and the only doctrines "commensurate" therewith, are those of a "natural religion," compounded of itself and "the moral sense in man." As for the Bible, its doctrines *not* being commensurate with scientific teaching; its religion *not* being natural; its respect for the moral sense in man *non-existent*; it never could have been the truth: obviously not, or it would be still. For many ages it has been a very good substitute; but now it is bygone, worn-out; it has been completely superseded by modern science.

Of course, if our Bible *is* this superseded "theory of Revelation," man's guaranteed eternal life is not worth the page it is printed on: for how can a God whose promises were put into His mouth by the theorists who invented Him either undertake or fulfil an undertaking? "THUS SAITH THE LORD!" Out upon ye, Moses, David, Isaiah, and the rest! Your God is your delusion! He never spoke a word, either to you or any one else!" That is the legitimate outcome through the Bible "a theory of Revelation." And if that is not an invalidation of our *Faith* by modern science, what else to call it, I know not. But modern science having neither proof that our Revelation is no more than a theory, nor colourable pretext for supposing so, why does she obtrude that statement? Why? because she has started in opposition: and like some shabby tradesman, she puffs her own article at her neighbour's expense. "If you want true science, the genuine article, deal with me. Next door not to be depended on. The concern is a sham—its proprietor a myth; and its pretended science, not science at all!" Guilty of this meanness, does modern science deserve support? Our Bible a theory! its revealed God a non-entity! I call upon science to prove the scurrilous libel, or withdraw it.

Modern science has long had its advocates even in our pulpits; but Christian ministers aware of its latest pretensions, and who hold with it notwithstanding, have a difficult task before them. Still Sunday by Sunday, drawing for their analogies upon modern science, they must now publicly reconcile what they themselves denounce as poisonous grapes with that producing stock they hitherto have maintained a true vine.

I wonder if Dr. Tyndall foresaw that the legitimate recoil from such teaching as he gave at Belfast would assuredly be the re-con-

sideration by genuine Christendom of the whole of its relations with what is called science, with a view to their abrupt and final termination? He might have done so; he might easily have surmised that sooner or later his denial of the Christian's God would certainly be followed by their denial of that science in whose name he was selected to speak; and not in part, but altogether: for science, consistent with herself—her past must be of a piece with her present.

The most of us, in our innocence, have all along been believing in the beautiful lady who calls herself science, as "the handmaid of religion;" so she at one time delighted in representing herself, and we ever took her at her word. Never dreaming of any unchristian motives underlying her fair professions, we hitherto have listened to her counsels and been gradually guided by them. When she explained that the Bible Astronomy, Geology, Geography, and so forth, were not true, nor intended to be true, though the bulk of us were not so educated as to be able to follow her through "the experimental evidence," yet, considering she spoke in the interest of that religion whose service she professed, we implicitly believed her, and, dupes as we were, gave them up. Having a wonderful opinion of her cleverness, and unbounded confidence in her rectitude, it never once entered our minds she had a disguise to abandon. But now—now she has succeeded as she thinks in committing us to theories we must follow to where she herself stands; now, "abandoning all disguise," she exclaims, like Elihu of old, "I am full of *matter*," (Job xxxii. 18); not Elihu's, however, but a very inferior matter. Elihu reads forward—his matter is God: she backward—her God is matter.

So far as Christians are concerned, Professor Tyndall, whether he intended it or not, has re-opened the whole scientific question: and should it be held a kind of Quixotism to tilt in these days against such stone-wall conclusions as those of Galileo and Newton, pray as Dr. Tyndall been guilty of a less Quixotism by his denial, in this the nineteenth century of Christianity, of the Bible's God?

The fashionable course, I am sure, is to doubt Scripture and believe science: to her our perpetual cry is for more; so far from questioning the truth of the incredible tales she tells; so far from treating her as she treats the Bible, we are agape for greater marvels; and we swallow them whole. But is this reasonable? Why should Scripture, without proper knowledge of it, be doubted? and why should science, with no knowledge of it, be believed? The doubting spirit is by no means a bad one; yet when our spirit doubts according to its prejudices—strains at a gnat and bolts camels by the dozen—then, its doubtings, like its similar beliefs, are both foolish and mischievous. Instead of believing Scripture and doubting science, or believing science and doubting Scripture. for the sake of fairness, let us begin

*de novo*, by doubting both, reserving belief till doubt is satisfied.

"But how is it possible," you may ask, to doubt science's proved facts? We would gladly accept the Bible cosmogony if we could, but how can we? The exact sciences shut us up to the conclusions that the Bible astronomy is wrong, that its geology is wrong, that the earth, so far from being the centre of the universe, is a mere speck in it; that the earth is not flat but round, that it is not moveless but moving. How is it possible to escape these impregnable facts?"

Our duty will be to inquire if these stated facts *are* impregnable. But, meantime, this also we must consider: if we continue one by one to desert the Bible positions, as we have been doing, if we associate with the holders of these views whensoever they elect to take another step, as they say, in "advance," the alarming likelihood is, that beginning with the received astronomy, we shall get gradually but surely on to Tyndallism, Spencerism, and Darwinism, and end by not apprehending a creating and controlling First Cause. Consent with the philosophers that the Bible speaks unreliably from its presumably Divine side upon scientific subjects, and what is in the way of its similarly speaking upon all others? Consent with the wisdom of this world, against which the Bible itself warns us, and your God may eventually become, like his whose words have been quoted, a may-be, rather than a must-be; a dim human possibility, rather than a divinely revealed fact.

"And wherefore not, if that be really the truth?" Quite so; but is it? The philosophers having raised that question, and given their doubts in the form of beliefs; now it devolves upon the other side to give facts and reasons for the contrary belief that is in them.

In the complicated quarrel before us, we indeed are deeply concerned, and had need be very careful lest direct personal interest in the issue should bias our judgment of its merits. We have looked at the no longer disguised leadings of what is called Science, as she herself having invited attention to them, it was fitting we should: let us now give to them their proper place and influence. All they should cause is this: they should stimulate to extra carefulness in the search we are making into the rights and wrongs of this contention. Those of us who are Christians must not remember we are so to the extent of allowing our Christianity to blind our judgment; neither must those who agree with science be men of already made-up minds.

If we should find that science, so called, has an unanswerable case, let us say so, and honestly cast in our lot with hers. But, on the other hand, if we should be of opinion that the Bible positions are good, let us back to our allegiance, and, if necessary, defend them like men.

Into the examination of these positions we cannot go now: the task is a very arduous one, and must be reserved for my next lecture.

*To be continued.*

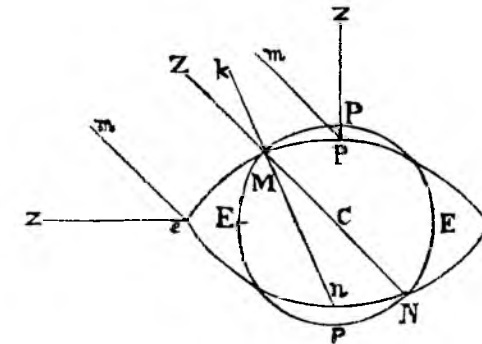
## OUR OBSERVATORY.

"ERROR IS ALWAYS INCOHERENT."

On the Figure of the Earth and its supposed connexion with the Vibrations of a Pendulum. By CAPT. WALTER FORMAN, R.N.

*Continued from our last.*

This appears to me to be so self-evident, that I should hardly have thought it necessary to illustrate it by a figure, if experience had not convinced me of the difficulty of making even the wisest philosophers comprehend the force of a proposition when their minds are set against it; and that will always be the case, when they are called upon to retract as error what they have formerly held to be sound doctrine.



Let P E P E, in the annexed figure, represent the earth, as it was created, a perfect sphere; and p M e the same earth depressed at the poles and elevated at the equator in consequence of its centrifugal force. Now, upon the principle that all bodies gravitate towards the centre, it is clear that a star, which is in the zenith at M, would be just  $45^\circ$  from the zeniths both of the pole and of the equator.\* The angle z p m is just equal to the angle z e m, and consequently there must be just as many degrees of latitude between p and M as there are between e and M; but the measured distance between M and p is a great deal less than it is between M and e. If the earth had been a sphere, the distance between M, in the latitude of  $45^\circ$ , and the pole would have been just equal to its distance from the equator; but in the present instance, the same number of degrees of latitude towards the pole are so much shortened (in consequence of the sinking of the poles) as the line M p is shorter than the line M P, while, towards the

\* It can hardly be necessary to inform the philosophical reader, that, as the stars have no sensible parallax, the direction of the star, both at the pole and the equator, must be parallel to the line M.Z.

equator, they are so much lengthened as the line M e is longer than the line M E.

The Newtonian philosophers, in direct opposition to the principles which at all other times they acknowledge, have conceived the singular notion that the zenith of every place is directly perpendicular to the earth's surface, but they might, with equal propriety, have supposed that the zenith, on the side of a hill, was also perpendicular to its surface. A plummet suspended by a line will always show the direction of the zenith, and, if this must necessarily be perpendicular to the surface, why is it not so at the side of a hill? Upon their own principle of universal gravitation, the zenith of every place is directly opposite the point where the power of the earth's attraction is strongest, and if that point be not in the centre, it is at least in that direction where the greatest quantity of matter is to be found. Now, as there is more matter in the direction M C N than there is in the direction M n, which is perpendicular to the surface, it evidently follows that the zenith M must be at Z, and not at k; and consequently, if the admeasurements of these philosophers can be depended upon, the earth's figure must be directly the reverse of what has heretofore been supposed.

I shall here take the liberty of making a few observations upon the principle, by which these philosophers have endeavoured to ascertain the *exact* length of a degree of latitude in different parts of the world. For my own part, I readily allow that it may be sufficient to enable us to give a near guess at the number of miles comprised within the earth's circumference; but when so nice a calculation is required as the difference in the length of any two degrees of latitude, I do not think that the least dependence can be placed upon so uncertain a principle. It is acknowledged in a paper lately sent forth by the Astronomical Society, that our tables of refraction are not to be depended upon in very low altitudes; and how a correct trigonometrical survey can be performed, without making allowance for refraction, is beyond my comprehension. The spirit level can be of no service, unless we know what to allow for refraction, and we are informed by the highest philosophical authority, that our tables of refraction are not to be depended upon! Those philosophers, that were sent out to measure the degrees of latitude, either did make allowance for refraction, or they did not. If they did not, their calculations, in both places, must have been erroneous; if they did, as they could only have guessed at the proper quantity, they may not have allowed enough; and, in both cases, as the refraction is always greater in high latitudes than at the equator, a mistake must necessarily have produced a greater error in a high than in a low latitude. If they

were right, they could only have been right by chance, and chance is not to be admitted into a mathematical demonstration.

My own opinion is, that the earth is a sphere, because, as that figure appears to me to be most convenient, it is most likely that it was so formed at the creation; and the supposed differences in the length of the degrees of latitude may fairly be attributed to a mistake in the above-mentioned calculations, owing to the want of a correct table of refractions. I give this, however, merely as an opinion, for I have no means of proving it; and, as the discovery of truth is the sole object I have in view, I shall not attempt to conceal, that, *if the fact may be depended upon*, the spheroidal appearance of Jupiter, furnishes a powerful argument in opposition to this opinion.

If it can be satisfactorily made out that the spheroidal appearance of Jupiter is real, and not the defect of some optical deception, analogy will certainly be in favour of the Newtonian theory; but I contend that all the other premises of these philosophers either prove nothing of the kind, or directly prove the contrary. By their own principles, a change in the earth's figure, from a sphere to a spheroid depressed at the poles, instead of increasing, ought to diminish the differences, in the vibrations of a pendulum, that must necessarily be produced by the centrifugal force; and the length of the degrees of latitude, instead of increasing as these philosophers have reported, would have decreased all the way from the equator to the poles.

As I have never had an opportunity of measuring the proportions in Jupiter's figure, I shall not presume to give an opinion on the subject, but I know, by my own experience, that, without intending any deceit, we are all very apt to fancy facts which have no existence, whenever these facts are necessary to prop up our hypothesis. Let the figure of Jupiter however be what it may, it does not necessarily follow that the solid parts of the earth must therefore have been created in a fluid state; and if not, the centrifugal force could have had nothing to do with the effect.\* If it had been necessary that the

\* In the biographical sketch of the late Sir William Herschel, which has lately appeared in the "Edinburgh Philosophical Journal," it is stated that that eminent philosopher ascertained that the proportion which the polar axis of Mars bore to its equatorial diameter was as 15 to 16. Now the velocity of the centrifugal force in Mars is not more than half what it is in the earth, and yet we are told that the difference in the proportions of our polar and equatorial diameter is only as 289 to 290! Every one surely will allow, that effects are always proportioned to the power that produces them, and, in that case, I shall be glad to be informed in what way a minor power can produce a greater effect? One of two things then is evidently certain, either this supposed spheroidal appearance of Mars is deceptive, and, in that case, we have a right to infer the same in Jupiter's appearance, or their centrifugal forces have nothing to do with the formation of their figures. Again, if we may trust to appearances, Saturn is more flattened at the poles than Jupiter, and yet its centrifugal force is not near so great: but what is still more extraordinary, the late Sir William Herschel discovered that there is a great dissimilarity in the figures of these two planets, which certainly proves, either that these appearances are altogether deceptive, or else that their centrifugal forces have nothing to do with their production, for it is morally impossible that the same cause could produce dissimilar effects.

earth should have taken the form of an oblate spheroid, the all-powerful Being, who created matter out of nothing, had only to have willed, and it would have taken that or any other form he pleased. The Newtonian philosophers however are determined that the earth shall be indebted for its form to natural means alone, and thus, in order to get rid of a seeming difficulty, they run into a real absurdity. If the solid parts of the earth had ever been in a fluid state, the heaviest substances would naturally have sunk nearest the centre, and yet we always find that lead, gold, and all the heaviest metals, are resting upon substances that are lighter than themselves. Here no doubt I shall be referred to the systems of the geologists, and told of violent irruptions that have torn the earth up even from its centre. But in spite of all that has been said by the geologists upon this subject, the appearance of the different strata, even as they represent them in their treatises, indicate none of these commotions with which they are so fond of astonishing their readers. Where are the chasms reaching down even to the centre, which must have been the necessary consequences of these commotions? Why do the strata, for the most part, always incline in one direction, as if they had been gently lifted up by design, and not torn up by violence? These effects, if necessary, might possibly have been produced by earthquakes; but the same violent commotion that would have been requisite to lift the metals out of their beds, and toss them over those substances, which, in the order of things, must have been so much higher than themselves, would have broke these strata and scattered them in all sorts of directions, and it certainly is not in the nature of things that the chasms in all parts of the world, have been closed up.

The question concerning the true figure of the earth is of very great importance, especially to the Newtonian philosophers; for not only is it interesting in itself, but another of their hypotheses, by which they account for the precession of the equinoxes, solely depends upon this supposed change in the earth's figure. The Newtonian philosophers account for the precession of the equinoxes, by supposing that the accumulation of matter about the equator, which is occasioned by the earth's rotatory motion, is somehow or other, (for none of their hypotheses is intelligible), acted upon by the sun's and moon's attraction, by which means the equator is brought "sooner under them" than would otherwise have been the case.

"It has already been observed," says Ferguson, "that, by the earth's motion on its axis, there is more matter accumulated all around the equatorial parts than anywhere else on the earth. The sun and moon, by attracting this redundancy of matter, bring the equator sooner under them,\* in every return towards it, than if there was no such accumulation."

\* Dr. Brewster, in his Supplement to this work, has attempted to explain in what way this is brought about, but I confess that I am unable to comprehend him.

Now I have already shown that, with the exception of one analogous case, all the premises upon which the Newtonian philosophers have grounded their hypothesis, directly prove the contrary position; but admitting, for the sake of argument, that there may be an accumulation of matter about the equatorial parts, that fact will not at all assist them in accounting for the precession of the equinoxes. Let any one turn to the foregoing figure, and suppose the sun or moon to be placed in any direction he may think proper, and he will immediately perceive that, in the same proportion that any portion of matter in the earth is brought nearer either of these bodies, a similar portion will be carried further off. The loss of attraction on one side will just equal the increase on the other: the sum of both will be precisely the same, the centre of gravity in the earth will be in the same place, and how, in the name of common sense, can such a change produce any change in the power of the sun or moon's attraction? The only effect that could be produced by a change in the earth's figure, would be a diminution of the angle which the equator makes with the ecliptic, but that would not produce any change either in the places or the times of the equinoxes; which any one may convince himself of, if he will take the pains to represent it on paper by a figure; and consequently the Newtonian philosophers have endeavoured to account for this phenomenon by a cause, the existence of which is very doubtful, and which is altogether inadequate, even if it do exist.

The Newtonian philosophers, I have no doubt, will, as usual, effect to treat these observations with contempt; and I acknowledge that, though this is not the most honourable way, it is certainly the cheapest mode of putting down an adversary. It saves the expense of intellect, and, so long as the public prejudice shall be on their side, it will serve their purpose a great deal better than bad arguments.

WALTER FORMAN.

*Bath, May 6th.*

#### PLANE FACTS.

The German Emperor performed the ceremony of opening the gates of the Baltic and North Sea Canal in the spring of 1891. The canal starts at Holtenau, on the north side of Kiel Bay, and joins the Elbe 15 miles above its mouth. It is 61 miles long, 200 feet wide at the surface and 85 feet at bottom, the depth being 28 feet. NO LOCKS ARE REQUIRED, AS THE SURFACE OF THE TWO SEAS IS LEVEL.—*The Age*, Aug. 5th, 1893. This proves the World to be a Plane.

#### A QUESTION FOR ASTRONOMERS.

Does looking at the "maid in the moon" through a telescope, constitute an impertinent observation?

## NOTHING PRODUCES NOTHING!

By Lady Blount.

There is nothing in Scripture showing that there are other worlds, but the contrary, for God made the Sun, Moon, and Stars to serve this Earth, "and God made TWO great lights; the greater light to rule the day, and the lesser light to rule the night. He made the stars also." And God set them in the firmament of the heaven to give light *upon the earth*, "and to rule the day, and the night, and to divide the light from the darkness: and God saw that it was good. And the evening and the morning were the fourth day." Now note—"In the beginning God created the heaven and the earth." (Gen. i. 1). After this Moses gives account of what God created on the first, second, and third days of creation; but not until the fourth day were the Sun, Moon, and Stars created: and the Maker's purpose in creating them is given, (*viz.*), to divide the day from the night:—for signs, for seasons, for days and years: and to give light *upon the earth*.—Therefore, I would ask the unprejudiced and candid reader to answer to him, or herself the following question:—

If perfectly unacquainted with the teaching of modern astronomy, would such far fetched and preposterous notions ever enter the mind that the earth is a whirling globe, consisting of less than one-third land, and over two-thirds of water—tearing away through space at a thousand miles per minute (which contrary to all reason and experiences, water being level and not convex—and contrary to the Bible which tells me that the earth is *outstretched* like a plane—having foundations—and that it should "not be moved for ever,")? See Isa. xlii., 5; Jer. xxxi., 37; and Psa. civ., 5. In the days of my youth my father used to tell me much about the heavenly bodies, as he took great interest in them and sometimes lectured on astronomy. He taught me that our earth was a "planet" moving and rotating round the sun with its attendant the moon, at the rate of about 1,100 miles a minute, which orbit it completed once in the course of 365 days. The sun being one million three hundred and eighty thousand times larger than the earth, and that *it was calculated* that we are *about* ninety-five millions of miles distant therefrom (different astronomers differing from time to time, and disagreeing one from another in the matter of just a *few* million of miles!) But I cannot forget that with all due respect to my dear father, (whom I loved very dearly), I never felt to believe it at all. And the words lingered in my mind *it is calculated*; and the thought came (if not in so many words), how is it possible to start a numerical calculation upon 0, or without a root and real fact and number, and I wondered as a child

will wonder where they got their starting point. The unit I knew was requisite before tens, hundreds and thousands could be reached—let alone millions and billions—and not being able to put my thoughts into words, I got tired of wondering, and gave it up. But now I have come to middle age, my attention is again drawn to the same subject, and I find that these calculatists have *no true basis* for finding the root number for their prodigious calculations, *for neither the Bible nor Nature supplies them any one fact as a basis for their speculating*. Nor is there *one* word in the Scriptures upholding the Globular theory—its alone support being "Science," which an inspired writer says is "falsely so-called." The root word of science—*scio*—means I know. But God's word says that they (the professors of science) do *not* know (Rom. i. 22, 25), which is further proved by their teaching being contrary to His written word—from which word we may learn (Gen. i. 7—9) that the Creator made a firmament which he called Heaven; and divided the waters thereby. "And God said, let the waters under the heaven be gathered together unto one place, and let dry land appear:" therefore the firmament, heavenly bodies, and dry land or earth, are most certainly placed between the divided "waters."

Isaiah xi. 22 (R.V.) gives the shape of the earth as a circle—the description of the heavens as a stretched out curtain—a tent. Job xxvi. 10 (R.V.) describes the outer circle of the world, as being beyond reach of the sun's light and in the 136th Psalm 7—9, we read "To Him that made great lights—the sun to rule the day—the moon and stars to rule the night—thus showing that they were created to serve this earth alone in comparison with which they probably are very small—but this—together with their distance from the earth—who can accurately decide?—No one could, either by rule or calculation, or in any way—unless God reveals it. (See Jer. xxxi, 37.) So I am led to fall back again upon my early conclusions that nothing can be produced out of nothing, and to regard orthodox astronomy as erroneous, being the outcome of human invention, and the mythical production of those (after the fashion of the spirit possessed by the builders of the Tower of Babel) desirous of going beyond their seach—who only were the authors, and promoters in starting these theories, in setting them forth as mere problems, and suggestions. But years are supposed to have rolled them into accepted and solid "facts" which all truth seekers and Christians would do well to reject; and accept nothing that differs from the Bible account of Creation—to the glory and honour of Jehovah our God.

Quite lately, I have received letters from two correspondents, in which they ask me what the shape of the earth has to do with salvation? To the first enquirer, who had been himself dwelling



upon the subject in preaching, I answered—I know of nothing of greater importance than bringing to light error which upsets the truth of the Bible (as does the popular and orthodox teaching in astronomy), but if you do not think it advisable to bring it forward, why do you do so? To my second enquirer who had introduced the earth as a globe in an article which he had written for publication, I quoted my letter in answer to my first correspondent, adding, that it was quite natural that Christian globe theorists should be desirous of avoiding this subject when they come in contact with Christian opponents, the former having not one word of scripture to uphold them; their argument must fall through.

### FANCIES AND FACTS.

C.H. "I said nothing about observing the earth from the sun. G.M.'s "simple method" involves the idea that the sun is in several places at once! Is this "actual observation" "avoidance of suppositions," etc.? Zetetics habitually quote two-century-old estimates of the distance of the sun. They might as well compare a rough sketch with a photo and then say, "photography is evidently uncertain." G.M. draws his figure so as to exclude parallax, and then says there is no parallax there! The sun's parallax is so small that it is generally omitted in ordinary arguments about latitude. G.M. omits it, and then argues as if his omission altered the facts!"

G.M. In Mr. Harpur's fig. 2 (Sept. 1894, p. 7), his lines of direction from the various points of latitude meet at the point S—the sun. My fig. 3 (p. 8, same No.) is in direct contradiction. In reply he treats us to his *ipse dixit*, that "a thing can only be in one place at a time, and this place must be where the various lines meet which represent the directions in which it is seen."

He will ignore the truth universally accepted that latitude is found in connexion with the *apparent* direction of an observed object—and which he himself postulates in his own paper (quoted in last paragraph p. 8, Sept. 1894.)

We will ignore the truth that the apparent direction of the observed object varies according to the latitude of the station of observation. His attempted application of Trigonometry necessitates the *supposition* of the eye at the point S. Now I challenge him to give us the observed altitude of the sun at equinox for the points of latitude 10° 20° 30° 40°, &c., and by the unavoidable sequential construction to show that the lines of direction meet at the same point, whether upon the plane or spherical theories. He has laid bare no fallacy in either the construction of my figures, or my reasoning.

My "simple method" involves the unavoidable conclusion that the *apparent position* of the sun, even for any number of simultaneous observations, varies according to the observer's latitude. I have stated plainly that such observations do not enable us to determine the sun's position, but merely to deduce the observer's latitude. No astronomer or navigator would dispute this—the very foundation of their finding their way over "earth's" surface. Again let it be said, if at equinox the sun be vertical to the equator, and simultaneously upon the horizon of the pole—directions which are at right angles—now let Mr. Harpur distinguish himself in showing by construction, in accordance with his own accepted postulate, that the sun's centre as a point, occupies the same position resulting upon these two observations; and better still let him add another ob-

server at latitude 45°. That is for the plane, now let him take the sphere, a line vertical to the equator, also a line on the plane of the horizon of the pole—the two directions on which the sun is seen at equinox—are both at right angles to earth's axis, and therefore are parallel—can he show that parallel lines make an angle by meeting at a point?

My various lines of direction are not suppositions, but are in accord with *actual observation*. Any intelligent person who can observe the meridian sun, and will do so, can prove this by observing at the equinox and the solstices. As the sun's declination increases or decreases, so does the observed altitude vary. But declination and latitude correspond; and it will be seen that, supposing the sun's vertical distance from the earth to be constant, yet the observed altitude will not show this vertical distance to be maintained.

Therefore the same apparent variation in the sun's position will result, upon variation in observer's latitude, or variation in the sun's declination. How shall one forbear asking if it be ignorance of these INCONTESTIBLE TRUTHS which prompts Mr. Harpur's BASELESS CONTENTIONS?

"Two century old estimates of the sun's distance." Well done Mr. Harpur! Bravo!! He has the truth at last—*estimate* is a fitting word—seeing that the data are most purely hypothetical. Now he must become a Zetetic, which merely involves accepting what one *really finds* (and that is very little, except our own ignorance.) But *principles* may be eternal, that which was true geometrically or mathematically 2,000 years ago (or 2,000,000,000 years ago, Ed.) is equally true to-day. 'Tis but the HYPOTHESIS which will have to give place.

My geometrical figures are used like all such figures are, NOT AS THE PROOF, but merely TO ILLUSTRATE the reasoning. As perfection in instruments is approximated, parallax becomes less; it is fair therefore to conclude that attained perfection would annihilate parallax, which would accord perfectly with the geometry of the question. I challenge Mr. Harpur to introduce parallax in connexion with my figure 4.

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all newsagents, reading rooms, and railway book stalls. To be had direct from the Hon. Sec., post free, to any address in the postal union for 10d. per year in advance.

All monies for the Society must be paid direct to the local vice-secretaries, or direct to the Hon. Secretary and Treasurer, Jno. Williams. Post office orders to be made payable at Sumner Street, S.E.

We propose that those who are desirous of having a good Map of the World as a Plane, should remit a subscription or donation for the purchase of a block to produce one, the cost of which will be about £15. All subscriptions will be acknowledged in the *Earth Review*, and subscribers, if desirous, will receive copies to the value of their subscription.

#### SUBSCRIPTION LIST.      £ s. d.

Edward D'Arcy Adams, Esq.,	...	...	2	0	0
James Humble, Esq.	...	...	0	10	0
Editor <i>Earth Review</i>	...	...	0	10	0

Subscriptions now due should be forwarded to the Hon. Secretary.

Lectures have been delivered by Mr. A. Perry, at Ashton-u-Lyne, on "The Surface of Water," the Press reports that "some of his revelations caused surprise." Mr. J. Naylor, of Birmingham, on "Two Views of the Universe Explained and Contrasted." "Several were convinced of the truth that the earth is a plane, and all were greatly impressed."

## Answers to Correspondents.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o Mr. J. WILLIAMS,  
32, Bankside, LONDON, S.E.

C. HARPUR.—Your strictures upon G. M.'s reply is answered. But—  
What do you want to knock the man about for?  
What's Capt. Foreman done he should'nt do?  
He's got angles, curves and straight strokes,  
Letters, globes and fine pokes,  
Is'nt he every bit as good as you?

Will you tell us why your brother theorist (Capt. Foreman) draws his lines M.P.Z.M.M.E. *parallel*? Observe: each line is directed to a star in the direction C M Z.; and his dia. is true to the globular theory. Why do these lines meet at *the same point*, eh? Your brother theorist anticipated you, see his opening remarks in this issue. Do you think that a man's common sense would lead him to expect that when *the cause* is removed, *the effect* will not *cease*? If not, why compare the action of hydrogen in a vacuum, to its action not in a vacuum? Do you remember that you told the readers of the *Birmingham Weekly Mercury* last September, that "heaviness *causes* a body set free near the earth to move towards the earth?" Then why does hydrogen gas, which has "heaviness," not "move towards the earth" as you assert? You will do well to study to be consistent and logical. See our reply to Scroggins.

VACHTSMAN.—Hearty thanks for your "proofs." They shall appear as space permits. Continue to investigate, and send us all the *practical* evidence you can. The columns of our Membership Book is not yet full, so there is plenty of room for your name.

C. R. E.—Thanks for you letter and suggestions. See our open column. I hope to see your name on our Membership Book. Your third question has been answered, see Review, October, 1893, Scientific Falsehoods.

S. C. GOULD.—Hearty thanks for your Classical Magazine. Its aim and tone should secure a wide circulation for it. Thanks also for mentioning our Review.

THE EDITOR—*The Torch*.—Thanks for your offer to place our literature on your bookstall where you lecture. We have sent you on a supply, and wish you success in your fight against error.

A. PERRY.—No, the teaching of *Knowledge* is not "according to the Word of God." Observe their language and you will see at once that they are in total ignorance about anything of God's Universe. It is the universe (globe) of their own fanciful forming that they are occupied with, hence the writer of the article referred to, speaks of "the past conditions of OUR OWN WORLD!"

H. V.—Thanks for the *Flaming Sword*. We are glad to see that the Editor owns that "Parallax and his advocates *have given* abundant proof of the fact that the earth is NOT *convex*." He evidently does not possess a logical mind, or he would not in the very next breath contradict himself by asserting that we "do *not* present one statement in proof of its being an extended plane, or flat surface!" Why, every proof recorded by "Parallax is a *practical demonstration* that the earth is a vast irregular plane, and it is those *proofs* that *prove* that Dr. Teed's "perspective foreshortening" is nothing but assumed data, on which to build an house of conjuring cards. If the experiments of Parallax are *not* proofs that the earth is a plane, they are no proofs at all, and therefore do not "conclusively demonstrate the fallacy of the convex theory of the earth," as Dr. Teed says they do. We observe that he says on p. 40, "however skilfully the lion's skin may be adjusted, the ass's ears will sooner or later obtrude."

J. HICKLING.—Your letter is, "*telum imbelli sine ictu!*" If the expression "bewitched fools," demonstrates our cause to be "rotten to the core," what does the following expressions from your own school demonstrate your own cause to be? The society of screaming idiots—great fat savants—flat earth prevaricators—longitudinal lunatics—wild-mannered meredional maniacs—Balaam's war-horses—rhinoceros hided, high pressure human bombs—parallactic maniacs, &c., &c. If Mr. McInnes is "an inflated bombast," what is Prof. Alfred Russell Wallace, F.R.G.S., who in a letter to Mr. Brough, dated January 6th, 1872, called Zetetics "incapable fools?" Take heed to the good old proverb found in Matt. vii., 5.

LADY BLOUNT, J. L. K., A. P., and others.—Thanks for your encouraging and esteemed remarks. We shall try and keep the E. R. up to the tone of No. 2 (N.S.)

II. H. SCROGGINS.—Yes, an ounce of fact is worth 10,000 tons of theory. To your questions we beg to say:—(1) Mr. Morrow's theory (at least so far as the enspherical part goes), was taught by the oldest Greek school of philosophy—the Ionian, of which Thales was the founder. (2) He does not advance any proof that we "live inside of a globe." You will observe that he says, "If (an expression implying doubt) above as a canopy, it IS (a positive expression) beneath as a concavity." True "Parallax" "does not give any definite conclusion as to what the waters rest upon." But we ask with you, WHO CAN? Of course we mean Zetetically, not speculatively. (3) Yes, the expression "central sun" implies that "other suns" exist, and "visible sun," the existence of an invisible sun." (4) Yes, the statement that "the visible sun, moon, and stars are within the air," is anti-scriptural, for God declares that He "set them *in the firmament of the heaven* to give light upon the earth." Truly as you say, "who *can* know more than they can see in this matter, and what God tells them in the Scriptures of Truth?" (5) No, it cannot be demonstrated by "descending into a body of clear water," that we "cannot see beyond the limit of the air, or atmosphere." To Zetetically demonstrate any fact of Nature, the conditions must, in every sense, be THE SAME. Light *can* be seen under water, but the depth at which it can be seen, depends upon the condition the water is in. I know from personal experience and experiment, that light can be seen from under clear water, at a distance of 50 yards. What have fishes got eyes for? Eyes are useless without light. Hence we conclude that light is *not* confined to the air. Thanks for your satire which will appear in this issue. We trust to hear from you again.

J. T. B. DINES.—Thanks for your letters, shall appear in our next *if* space permit.

A. MCINNES.—Thanks for yours to hand. Shall appear in our next. Too late for this issue.

## The Zetetic's Open Column.

The questions in this column are open for Zetetics to reply to.

Questions unanswered, Nos. 2 and 3.

ANSWER (4). Because by the operation of the natural law of perspective, associated with the peculiar construction of the eye, objects *below* the line of sight *ascend* to the level of the eye line, while objects *above* appear to *descend* to the eye line. At the junction of the lines an acute angle is formed, beyond which objects cannot be further discerned without a greater optical power, or an increase of altitude which gives a proportionate increase of angle. See E. R., No. 4, p. 1 to 4.

J. ATKINSON.

ANSWER (4). When a person goes up a mountain, or up in a balloon, the line of sight *really rises*, but the horizon, or boundary line, *only seems to rise* higher and higher, and as the height increases, the horizon becomes more distant.

Our line of sight is always half way up our circle of vision, and in proportion to the height of the line of sight, so is the distance greater to the horizon. When ships and other objects are beyond the observer's horizon, the lower parts are hidden, therefore to see them, it requires a higher line of sight, obtained by ascending to a greater elevation from where we also obtain a more distant horizon. In perspective, receding lines appear to converge to the point of sight, which is level with the eye of the observer.

THOMAS WHITTLE.

QUESTION (5). How is it that when there is a lunar eclipse the shadow is always round?

QUESTION (6). How is day and night formed if the world is not a globe?

C. R. E.

## PRACTICAL FACTS v. MODERN ASTRONOMY.

Evidently we have not got at the bottom of the matter yet! In August, 1890, the C Manoeuvre Fleet signalled with search lights to colliers seventy miles away. This was some 500 miles south of the Azores, and on a fairly clear night; and the information comes from Mr. F. T. Jane, the artist who was on board at the time. *Pearson's Weekly*, December 29, 1894.

## A LURCHING QUESTION.

Does the leaving of the Globe in the lurch of  $23\frac{1}{2}^{\circ}$ , cause it to be in a difficult position. If not, what hinders it from lurching over to  $90^{\circ}$ ?

## HIS FATHER HELPED.

Whilst walking down a street the other day, I overheard the following conversation between two urchins:

"I tell yer Bill, yer dunno nothin' about it," said the first; the world goes round and round on its axle just like the wheels of a cart, and it's worked by the blokes in the prisons where they have to tread big wheels to make it go round."

"Garn! Who yer getting at?" cried the second.

"I tell yer it's truth," replied the first, in a virtuously indignant tone at having his testimony disbelieved. "I reckon I ought to know when my father's been there."

THE  
EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

NO. 4 (NEW SERIES).

JULY, 1895.

PRICE 2D.

## THE EARTH AN IRREGULAR PLANE.

By WILLIAM THOMAS WISEMAN, F.R.G.S., etc.

The surface of all water, when not agitated by natural causes, such as winds, tides, earthquakes, etc., is perfectly level. The sense of sight *proves* this to every unprejudiced and reasonable mind. Can any so-called scientist, who teaches that the Earth is a whirling globe, take a heap of liquid water, whirl it round, and so make rotundity? He cannot. Therefore it is utterly impossible to prove that an Ocean is a whirling rotund section of a globular earth, rushing through "space" at the lying-given-rate of false philosophers.

When a youth, I stood upon the Dover shore of the English Channel, and was told to watch a departing ship. "See! There she goes; down, down, down! The hull has disappeared! She is out of sight! Now, my boy, you have had an ocular demonstration that the world is round (meaning globular in shape) AND SEEING IS BELIEVING." I walked up to an "old salt" who had a telescope, and said: "Can you see that big ship through your glass that's gone down the Channel, and is now out of sight?" "Yes, my son. Look!" The big ship immediately came into view again, as I peered through the old sailor's glass! "Why! my — told me the Earth was round, because that ship I can now see had turned down over the horizon!" "Aha! aha! sonny, I know they all says it! Now, I have been all over the world, but I never believed it. But, then, I have no learning, only my senses to rely upon, and I says SEEING IS BELIEVING."

I now, after many years, endorse the old sailor's experience, that the world is not a globe, and I have never found the man who could prove by any practical demonstration that he, or I, are living on a whirling ball of Earth and water! How is it that the atmosphere goes round with it? By what law does the *dense* Earth and the *rare* air rush around together? Declare, ye scientists, IF YOU KNOW! The Scriptures of God's inspired Prophets contradicts the unreasonable, illogical, unscientific delusion, and false philosophy, that *the fixed Earth* is a hollow fireball with *several* motions!

*There is an old adage, by which you can fix them,*

*"There is not one lie true, no, not if you pick them."*

## The Zetetic's Open Column.

The questions in this column are open for Zetetics to reply to.

Questions unanswered, Nos. 2 and 3.

ANSWER (4). Because by the operation of the natural law of perspective, associated with the peculiar construction of the eye, objects *below* the line of sight *ascend* to the level of the eye line, while objects *above* appear to *descend* to the eye line. At the junction of the lines an acute angle is formed, beyond which objects cannot be further discerned without a greater optical power, or an increase of altitude which gives a proportionate increase of angle. See E. R., No. 4, p. 1 to 4.

J. ATKINSON.

ANSWER (4). When a person goes up a mountain, or up in a balloon, the line of sight *really rises*, but the horizon, or boundary line, *only seems to rise* higher and higher, and as the height increases, the horizon becomes more distant.

Our line of sight is always half way up our circle of vision, and in proportion to the height of the line of sight, so is the distance greater to the horizon. When ships and other objects are beyond the observer's horizon, the lower parts are hidden, therefore to see them, it requires a higher line of sight, obtained by ascending to a greater elevation from where we also obtain a more distant horizon. In perspective, receding lines appear to converge to the point of sight, which is level with the eye of the observer.

THOMAS WHITTLE.

QUESTION (5). How is it that when there is a lunar eclipse the shadow is always round?

QUESTION (6). How is day and night formed if the world is not a globe?

C. R. E.

## PRACTICAL FACTS v. MODERN ASTRONOMY.

Evidently we have not got at the bottom of the matter yet! In August, 1890, the C Manoeuvre Fleet signalled with search lights to colliers seventy miles away. This was some 500 miles south of the Azores, and on a fairly clear night; and the information comes from Mr. F. T. Jane, the artist who was on board at the time. *Pearson's Weekly*, December 29, 1894.

## A LURCHING QUESTION.

Does the leaving of the Globe in the lurch of  $23\frac{1}{2}^{\circ}$ , cause it to be in a difficult position. If not, what hinders it from lurching over to  $90^{\circ}$ ?

## HIS FATHER HELPED.

Whilst walking down a street the other day, I overheard the following conversation between two urchins:

"I tell yer Bill, yer dunno nothin' about it," said the first; the world goes round and round on its axle just like the wheels of a cart, and it's worked by the blokes in the prisons where they have to tread big wheels to make it go round."

"Garn! Who yer getting at?" cried the second.

"I tell yer it's truth," replied the first, in a virtuously indignant tone at having his testimony disbelieved. "I reckon I ought to know when my father's been there."

THE  
EARTH-NOT A GLOBE-REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

NO. 4 (NEW SERIES).

JULY, 1895.

PRICE 2D.

## THE EARTH AN IRREGULAR PLANE.

By WILLIAM THOMAS WISEMAN, F.R.G.S., etc.

The surface of all water, when not agitated by natural causes, such as winds, tides, earthquakes, etc., is perfectly level. The sense of sight *proves* this to every unprejudiced and reasonable mind. Can any so-called scientist, who teaches that the Earth is a whirling globe, take a heap of liquid water, whirl it round, and so make rotundity? He cannot. Therefore it is utterly impossible to prove that an Ocean is a whirling rotund section of a globular earth, rushing through "space" at the lying-given-rate of false philosophers.

When a youth, I stood upon the Dover shore of the English Channel, and was told to watch a departing ship. "See! There she goes; down, down, down! The hull has disappeared! She is out of sight! Now, my boy, you have had an ocular demonstration that the world is round (meaning globular in shape) AND SEEING IS BELIEVING." I walked up to an "old salt" who had a telescope, and said: "Can you see that big ship through your glass that's gone down the Channel, and is now out of sight?" "Yes, my son. Look!" The big ship immediately came into view again, as I peered through the old sailor's glass! "Why! my — told me the Earth was round, because that ship I can now see had turned down over the horizon!" "Aha! aha! sonny, I know they all says it! Now, I have been all over the world, but I never believed it. But, then, I have no learning, only my senses to rely upon, and I says SEEING IS BELIEVING."

I now, after many years, endorse the old sailor's experience, that the world is not a globe, and I have never found the man who could prove by any practical demonstration that he, or I, are living on a whirling ball of Earth and water! How is it that the atmosphere goes round with it? By what law does the *dense* Earth and the *rare* air rush around together? Declare, ye scientists, IF YOU KNOW! The Scriptures of God's inspired Prophets contradicts the unreasonable, illogical, unscientific delusion, and false philosophy, that *the fixed Earth* is a hollow fireball with *several* motions!

*There is an old adage, by which you can fix them,*

*"There is not one lie true, no, not if you pick them."*

## BIBLICAL COSMOGRAPHY v. TECHNICAL EDUCATION.

MR. HOPE, DEAR SIR,—Having just read the account in last week's *Southampton Observer* of your sermon on the previous Sunday, wherein you guarantee £200 for "one single portion of Scripture" in support of Sunday Observance, you will excuse me if I venture to offer you the same amount for one verse that will show you are justified in teaching (as a Bible truth) the man-made theory of the earth being a revolving globe.

You will, I think, agree with me in saying that ministers of any denomination who profess to believe the truth, ought to be careful to avoid those theories of agnostics and others which directly contradict the plain statements of God's Word.

The danger of the course usually followed is seen in the recent declaration of T. H. Huxley, who, as a believer in the globular form of the earth, declares the Scriptural statement of the deluge to be a "pure fiction and a physical impossibility."

Is it surprising that many are openly denying the Scriptural account of the Creation?

All who refuse the light which God has given them are, as you have so often remarked, preferring the traditions of men which make void the Word of Truth.

Trusting you will further study this subject without prejudice.

Yours Respectfully,

J. F. SHEPPARD.

(MR. HOPE'S reply.)

DEAR MR. SHEPPARD,—Your letter offering me £200 for a text of Scripture which says the earth is round, came to me in due time. If I were a betting man I might with as much reason offer you the same amount for a text which says it is flat, for the Bible is obviously silent upon such points. You are mistaken in saying that I teach "as a Bible truth" that the earth is a globe. That is a geographical fact, *not* a "Bible truth;" for the Bible is not a text book of science, but it deals with our manner of life, and is God's revelation of His will to us to make us wise unto salvation, which distinction you do not seem to comprehend.

Whether a man thinks the earth to be round, or square, or flat, or any other shape, is merely a matter of technical education in physical geography, and has little to do with his moral integrity. You say the globular idea is "man-made." What of that? So is the house I live in, and nearly all things with which I have to do. It is quite right they should be, for God wants men to use the intelligence He has given them. This is also true of all scientific knowledge. The circulation of the blood for instance is a "man-made theory," but it is none the less true for that. Would you respect me any more if I went about offering £200 for a text which says so, and then because no such text exists, repudiate the whole thing as a "man-made theory?" God wishes us to study His works and find out things pertaining to them not revealed in His written Word. The works of God declare the Gospel as much as the Bible, what we learn from the one is science, and from the other "Bible Truths," and both of course are in harmony, for both are the Word of God.

Now about some of the expressions upon which you rely for your ideas. The Bible was written for common people, and its language is such as is generally understood and used by the people, so we have such idioms as the sun rising, the moon giving her light, the stars falling, hearts breaking, &c. These were given as well understood expressions, and not as bold statements of scientific facts, nor

are they to be judged by the modern refinements of astronomy. To string a lot of such statements together, especially taken from the poetical books, and to dub them "Bible Astronomy" is to my mind wresting the Word of God.

Why not be consistent and study all branches of knowledge that way? Anatomy for instance. There is an old gentleman here who believes that a man thinks with his heart, and not with his head, for he says the Bible says so. No doubts he would give you £200 to produce a text which says a man thinks with his brains, and as you cannot, to be consistent you certainly ought to reject such an abominable man-made theory. Then you could go on with your study of physiology and learn the startling piece of medical information that a clever man's heart is on the right side, but a foolish man's on the left (Eccles. x, 2), and that some men have a double heart like the Dugong (1 Chron. xii, 33), and that in certain countries the heart melts (Josh. xiv, v. 8), and upon one occasion David's heart up and struck him (1 Sam. xxiv, 15). The heart you would also find is the real organ of speech, and often the skin of the teeth would be an interesting field for scientific research. So you might go on, *ad lib.*, and one could spend a lifetime on this one biblical membrane, and putting all these expressions together in a leaflet, call it "Bible Physiology," and with it go on a warfare against all other man-made medical theories. On the same lines you could get up a very interesting tract upon "Bible Botany." But what would it all be? Just a ridiculous juggle of words and play upon idioms, and you would certainly be making a very wrong use of the word of God, and would receive no life from it. In the little tract you sent me called "Bible Astronomy," you have precisely the same thing.

I think we often mistake what truth is. We get the idea that it is some statement of facts or dogma or creed, whereas the truth is only the Life of Jesus. He is the truth, and the man who knows Jesus knows the truth, irrespective of his knowledge of other facts, and he who does not know Jesus does not know the truth, even though he has a knowledge of every other fact, and is well posted and sound on all points of the faith (or the creed). The great mistake we are always making, and which Satan would have us make, is gloating over some wretched little quibble and thinking so much of it that it oversteps all else and becomes to us "the truth." It is so with this flat earth craze, and as far as my experience goes, it has hurt everyone who has taken it up, and led some directly out of the third angel's message. By their fruits ye shall know them, and I would rather steer clear of anything that I see leads away from God. There is no harm in any one believing that the earth is flat, but when that person gets the idea that it is "the truth," and must be accepted in order to be saved, then it becomes a deadly thing for it is in the place of Jesus.

Yours very Truly,

FRANCIS HOPE.

(MR. SHEPPARD'S reply.)

DEAR MR. HOPE,—Your reply to my letter received with thanks. It will not be necessary for me to take up either your time or mine in carrying on a lengthy discussion upon the subject forming the basis of our correspondence, but I should like, briefly, to notice a few of the arguments advanced with the object of showing that I am mistaken in my opinions upon a certain question which you appear to regard as one of minor importance, although the opinions you hold upon it are entirely contradictory to the plain statements of the Inspired Word of God.

Having yourself guaranteed £200 if a certain text could be found, I felt justified in offering you the same amount for one Bible text in support of the theory

that the earth is a "revolving globe." In response, you make the observation, that "if you were a betting man" you might with as much reason offer me the same amount for a text which says it is "flat."

Now I do not suppose that when you offered or advertised a reward of £200 for a text which you felt assured could not be found, that you were in danger of being regarded as "a betting man," and I know you won't suspect me as being one of the "betting fraternity" because I have followed your example at least in one respect. It is quite *true* that the earth is not "flat" as you are pleased to express it. I have never said it was. No sane man could believe the earth to be "flat" in the *literal* sense of the term. Why you should import the word "flat" in connection with this discussion you may best be able to decide. The hills, the valleys, the mountains, the earth itself—being, as the Bible expresses it, standing-out of the water, and in the water," 2 Pet. iii., 5, the foundations being laid that it should not be *moved* for ever Psalm civ., 5, r.v., established and it abideth or standeth Psalm cxix, 90, margin. These and many other passages are sufficient to show that the earth is not "flat," and by your introduction of the phrase you are apparently attempting to make much ado about nothing.

The Bible is not "obviously silent" upon certain facts that are clear enough to any unprejudiced mind; facts which clearly define the true, in contradistinction to the false theories which you was taught in your school-days. You profess to have discarded the teachings of men who have turned from the truth and believed fables, and you embrace every opportunity in public of showing how many of these fables have found their way into "the Church." Why then do you return and teach one of the most unreasonable of these fables? *viz.*, Modern Astronomy—a theory which has undermined or shaken the faith of multitudes in the scriptural account of the creation?

You proceed, however, to deny that you teach as a "Bible truth," that the earth is "a globe." You say it is "a geographical fact," *not* "a Bible truth," for "the Bible is not a text book of science," &c. But if I AM "mistaken," as you say, in saying that you regard *your opinions* on these matters as "Bible truths," the mistake, such as it is, rests (in a sense) upon your own shoulders; for you have repeatedly declared in public that you preached nothing contrary to the teachings of God's Word, and I was therefore fully justified, when hearing you declare at a Sunday afternoon meeting that the earth was "a globe," revolving round its axis every 24 hours—I was justified in believing that you considered *your opinions* on the subject to be in harmony with the Word of God.

You admit that the popular idea about "the globe," is *not* a Bible truth, but simply a "geographical fact." Well, if you feel called upon to support "geographical facts" which *directly contradict* "Biblical facts," you should be willing to acknowledge that there is great danger in following such a course. Our "faith should not stand in the wisdom of men, but in the power of God."—1 Cor. ii, 5.

You say "the Bible is not a text book of science." It is certainly *not* a text book of that science falsely so-called, against which the Apostle warns us: that "science," the teachings of which has caused many to err from the faith. 1 Tim. vi, 20, 21.

Is it not a pity that you should prefer the "traditions of men," who, by their advocacy of the "globular," or "revolving" globe theory, openly deny the Mosaic account of Creation, and the possibility of the deluge? An extract from a paper called the *Present Day Atheist* reads as follows:—"If Moses can be shewn to be caught red-handed in ignorance or error, what shall we think of the Christ who quoted and referred to him as an authority?" Let me ask you, Mr. Hope, to consider the motive and the meaning underlying those words.

You contend that whether a man thinks the earth to be round or square or flat, or any other shape, is merely a matter of technical education in physical geography and has little to do with his "moral integrity."

The subject of "moral integrity" has *not* been introduced by me, and your observation upon this point is therefore entirely uncalled for; but "moral integrity" from its highest and noblest ideal will not allow "geographical fact," so-called, or "technical education" to nullify the Word of God.

In reply to my assertion that the "globular" theory is "man-made," you ask me "what of that?" If it *originated* in the mind of man it is a "man-made theory;" and as the vain imaginations of men contradict the statements of Scripture, and you are a candid and an honest enquirer for truth, and believe in the superiority of the geographical laws that emanate from divine wisdom, you will unhesitatingly accept the divine ruling, and will not allow the reasonings of "scientific" men to assist in the spread of agnosticism or any other "ism" of similar origin.

You proceed in your line of argument by the adoption of a "similey" which certainly is a little amusing. You say, "so is the house I live in man-made." True; but God gave man the intelligence which enabled him to understand building houses. But when God created the earth, when He commanded and it *stood fast*, Psalm xxxiii, 9, the Creator did not need the "intelligence" or the help of man, and the comparison you draw, between what was pre-eminently the work of God and that which God intended to be the work of man, is hardy to the point. The next statement is to the effect that "the circulation of the blood" is a man-made theory, but it is none the less true for that!

Now considering the fact that the organism of the human body and the circulation of the blood must have originated in no other than the mind of God ("in whom we live, and move, and have our being,") it is simply inconceivable how you, sir, can without hesitation, declare it to be a "man-made theory." When the circulation of the blood was *supposed* to be first discovered, it was undoubtedly regarded as a very wonderful discovery indeed, but the fact was known by an all-wise Creator from the beginning. We learn from the *Youths' Instructor*, Jan. 12, 1893, that the originator of the theory that the earth is round (not flat) was probably Thales of Miletus, about 640 B.C. Will Mr. Hope venture to say "it is none the less true for all that?" It is not difficult to discern the fact that the theory of "Thales" has been very favourably received by wise men of later ages.

Next you say, "God wishes us to study his works and find out things pertaining to them *not revealed in His Word*." You will remember that when Zophar reproved Job for justifying himself, the question was asked "can'st thou by searching find out God? Job xi, 7. Some men are endeavouring *not* to search out God, but to dig out, from the maze of man-made mysteries, as many "theories" of human knowledge that will aid them in exalting the wisdom of men *above* that of their maker.

Again you say "the works of God declare the Gospel as much as the Bible; what we learn from the one is science, and from the other Bible truths, and both are of course in *harmony*, for both are the Word of God." It is certainly true that God's word and works harmonize absolutely; but it is an incontrovertible fact that what so-called science teaches to-day, is to an alarming extent undermining and lessening faith in the supremacy of the Word of God!

In my former letter I called your attention to an expression from a volume by Professor T. H. Huxley entitled *Science and Hebrew Tradition*, I will now quote it verbatim:—"The origin of the present state of the heavens and the earth is a



problem which lies strictly within the province of physical science. Whether the earth moves round the sun or the contrary—all these are purely scientific questions, and to all of them the Canonical Scriptures *profess* to give true answers. Not only do I hold it to be proven that the story of the deluge is a pure fiction, but I have no hesitation in affirming the same thing of the story of the creation. The deluge as described is a physical impossibility! Now you, Mr. Hope, will I am sure admit that such an affirmation (absolutely void of any proof!—ED.) as the one just quoted, cannot fail to have the effect of throwing very serious reflections upon the accuracy and inspiration of Holy Writ. There are many truth seekers in the present day who are beset with doubts and difficulties that they would gladly have dispelled, but if you or any other professing christian persist in preferring certain theories of men (in any way whatever) which are at variance with the testimony of Scripture, such a course of procedure cannot but tend to assist in the spread of those principles which will inevitably lead to doubt and unbelief.

Again, in referring to the works and word of God, you believe that "what we learn from the one is science, and from the other Bible truths, and that both are in harmony." This is a statement easily made, but it may be easily misunderstood. From man's definition of the works of God, contradictory deductions are frequently drawn. As a matter of fact, no individual could more effectually assist in the spread of the conflicting vagaries of "modern science" than the man who, while acknowledging the Bible as the only standard of appeal, practically denies it by his appeal to a standard of human authority for the confirming of certain preconceived notions which he is determined to retain.

You proceed to say "the Bible was written for common people, and the language is such as is generally understood and used by the people, so we have such idioms as the sun rising, the moon giving her light, the stars falling, hearts breaking, &c. Why you should refer to such familiar Bible expressions as "idioms" is by no means clear. The sun actually rises, it *really moves* (although globularists deny it), and on a certain memorable occasion Joshua ordered IT to STAND STILL. The advocates and adherents of the "revolving globe" theory deny the *literal meaning of this Bible fact*, and prefer a *scientific "invention,"* which according to an authority previously quoted, originated in the mind of "Thales" 640 B.C. ! An interesting piece of information appeared in the columns of the *London Echo*, March, 19, 1895, to the effect that "most people are aware that the earth makes one complete revolution round its axis once in 24 hours, but probably many are ignorant as to the high rate of speed in accomplishing the feat. The highest velocity ever attained by a cannon ball has been estimated at something like 1600 feet per second. The earth in making one revolution in 24 hours must turn with a velocity nearly equal to that of a cannon ball." !

A still more incomprehensible tale is reported in *Present Truth*, February 7th, 1895, which reads as follows :—"Owing to the non-coincidence of the earth's pole of rotation with its geodetic pole and the shifting about of the former. it is pointed out that the frontier between the United States and Canada being marked out in two parts,—there is a strip of land only 60 feet wide it is true, but large enough in area to embrace 100 big farms which come alternately under the jurisdiction of both countries. During April and May, 1890, and May, 1891, it was Canadian by rights; in November, 1890, and December, 1891, it was American!!! But another paragraph which appeared in the same paper, Jan. 31, 1895, is one far more deserving serious and thoughtful reflection than the sensational tale which has just been repeated, and you would do well to "read, mark, learn and inwardly digest" the truth contained in the extract which is as follows :—"People who are too incredulous to accept the reasonable statements of God's word are

always credulous enough to accept the most absurd and unreasonable theories that originate in the minds of man." (R. W. Clayden, M.A.) Another contributor to the same journal (G. B. Thompson) assures us that "THE BIBLE MEANS WHAT IT SAYS AND IT NEVER MEANS ANYTHING ELSE; so if we know what it says, we know what it means."

But to return; the "idioms" referred to. include that of "the stars falling." Now you, Mr. Hope, believe (that a meteoric display of falling stars has been more than once witnessed, but if you believe, as many scientists teach, that the stars are inhabited worlds, you would be confronted with a new difficulty which would certainly need explanation. The *London Echo*, Dec. 22nd. 1894, informed its readers that "up to now astronomers have not been able to estimate with exactitude the size of the planetoids, those diminutive worlds of which we know more than 390 to day" Canon Durst in the course of his sermon on Christmas Day, 1894, said, "we see the powers of God manifested in the stars above us, many of which are inhabited worlds!" We should, however, be content with the knowledge which God has revealed concerning His purpose with regard to the stars. He set them in the firmament to give light upon the earth, Gen. 17. The word of God contains no reference whatever to the "unfallen or inhabited worlds" that are *supposed* to exist.

You say that the "well understood" expressions which you term "idioms," are not to be judged by the "modern refinements of astronomy." Upon this point we are agreed. Modern astronomers are credited with a full share of mental capabilities, and are supposed to be fully acquainted with intellectual or astronomical "refinements." and the impressions they have left upon your mind have evidently not been effaced.

With the letter I sent you, a small leaflet, entitled, "Bible Astronomy" was enclosed, which contained 30 or 40 Texts from the Scriptures in support of the truth against which you are so strongly opposed. You say that "to string a lot of such statements" together, especially taken from the poetical books, and dub them "Bible Astronomy" is to your mind wresting the word of God!! I deny that it is so; it is *trusting* not *wresting* the word of God. You have given the expression of your "mind" in a somewhat abrupt and hasty manner, but if the placing together of such a large number of Bible passages to prove a truth that you are unwilling to acknowledge, I beg to say that you have made an unjustifiable and undeserved insinuation against Bible students who are at least as honest as yourself. Such an action is unworthy of you, and an unmistakeable proof of the weakness of your arguments.

After giving vent to your feelings in such a way that proves your "animus" against those who dare to place these "statements" together for such a purpose, you ask "Why not be consistent and study all branches of knowledge that way?" Anatomy for instance. You then introduce an "old gentlemen" as one who would "no doubt" give me £200 for a text which says that a man "thinks with his brains," but because I cannot find the words to suit him, I must reject such "an abominable man made theory." You then suggest that I should go on with a study of "physiology" and learn the "startling piece of information" that a clever man's heart is on the right side, but a foolish man's on the left—(Eccles. x. 2.) You think "the skin of the teeth" would be an interesting field for "scientific research." I will, however, not weary you with a recapitulation of your very kind suggestions. Such an elaborate line of argument I admit is quite beyond me; I won't attempt to follow it up. You could perhaps do so in such a way that would be satisfactory to yourself, but it is hardly probable that you would be able to find a man who could assist you in the unravelling of such mysteries.

The result of such investigations would undoubtedly be a "ridiculous juggle of words."

In the course of your letter you express an opinion that "the great mistake we are always making, and which satan would have us make, is gloating over some wretched little quibble and thinking so much of it, that it overtops all else and becomes to us the truth." This danger we certainly should avoid, but your "quibbles" and doubts concerning the truth of God's word and His creative power often arise through the vain inventions of men and their wonderful "scientific or astronomical" discoveries of which we hear so much. These "quibbles," "wretched," or otherwise, do a great deal of harm; they spread like a canker-worm and become imbedded in the minds of many who are not quite satisfied with God's revealed statements, and in this way "objections" are raised and *imaginary* difficulties exaggerated. The accuracy of certain Bible passages is disputed, with the effect of destroying that absolute confidence in the inspired word which we must possess if we would have that faith "which will not shrink though pressed by many a foe." It is true as an ancient writer has said, "Quirks and quibbles have no place in the search after truth."

I am sorry that you should, in concluding your reply, refer in a somewhat contemptuous way to what you call "the flat earth craze"; such language only shows how bitterly you are opposed to any interference with the universally accepted and popular notion, that this earth is a whirling globe flying through "illimitable space."

With what an awful world-revolving power,  
Where first the unwieldy planets launch'd along  
The illimitable void."—(Thomson's "Luminer.")

You say that the adoption of this "flat earth craze" has hurt every one who has taken it up, and led some directly out of the third angels' message.

By your adoption of such an unfair and misleading term, viz.—The "flat earth craze," the truth itself will not be affected. Contemptuous language does not disprove Bible facts. I have not been "hurt" by accepting and believing the Scriptural account of God's work in the Creation. I believe the truth on this subject on the ground that it is a Bible truth. I believe that all who will accept it will see more clearly than ever the harmony that exists between that large number of Bible texts, the meaning of which has so often been misconstrued for obvious reasons. By believing what God's word says, our faith will not only be increased but intensified.

In closing, I wish to notice for a moment the last paragraph in your letter. You say, "there is no harm in any one believing that the earth is "flat," but when that person gets the idea that it is the truth and must be accepted in order to be saved, then it becomes a deadly thing for it is in the place of Jesus."

If "that person" actually exists (which is doubtful) he is certainly making a great mistake. A merely *nominal assent* to any truth will never ensure a man's salvation, such an idea would indeed be a deadly thing, if, as you observe, it takes the place of Jesus.

In conclusion, let me just call your attention to an extract which appears in this week's *Christian World*. The words are taken from a new book just issued, entitled, "Gain or Loss." The writer says,—"I believe with all my heart that we have a final revelation of God's living and redeeming purpose in Christ, so that no improvement therein is possible or conceivable; but in all other respects the Bible is not a final authority, and all attempts for instance to make the science of the Bible tally with modern science is labour thrown away through a gigantic misconception. There is not in all the Bible a final utterance on Science."

I will not comment upon these words, but they are suggestive and represent pretty clearly the tone of "modern belief." The truth upon any subject should not be considered as of no real importance; instead of becoming a "deadly thing" it will have a contrary effect. It will not lead a man *away* from Christ; it will exalt Christ as the Fountain of Life and Truth; it will glorify the works of our Father who is in Heaven. In the words of sacred writ "we shall know the truth, and the truth shall make us free;" free from the entanglements and superstitions and bewildering inventions of scientific men who have made void by their traditions "the word of the Lord which standeth sure."

Let us then *accept* and not *reject* the truth which God has revealed in His Word.

Yours respectfully,

J. F. SHEPPARD.

D.V.—We shall in our October issue make a few remarks on Mr. Hope's statements, and ask him a few questions.—ED.

### HOW THE WORLD WAS MADE A GLOBE.

"The earth of the Newtonian theory is the mere creation of the fancy. Its shape has been determined on the ground, partly of imaginary, partly of positively erroneous elements; and results of subsequent experiments and measurements have, by means of purely mathematical factors and tentative formulas been adapted to its PRE-SUPPOSED FIGURE.—*Von Gumpach*.

### IS MODERN ASTRONOMY NONSENSE?

"The imagined ruin of Newton's theory did not satisfy Goethe's desire for completeness. He would explore the ground of Newton's error, and show how it was that one so highly gifted could employ his gifts for the enunciation and diffusion of such unmitigated nonsense."—*Professor Tyndall on Goethe's Farbenlehre*.

"A good many years ago a pilot in the Mauritius reported that he had seen a vessel which turned out to be two hundred miles off. The incident caused a good deal of discussion in nautical circles at the time, and strange to say a seemingly well authenticated case of the same kind occurred afterwards at Aden. A pilot there announced that he had seen from the heights the Bombay steamer then nearly due. He stated precisely the direction in which he saw her, and added that her head was not then turned towards the port. . . . Two days afterwards the missing steamer entered the port, and it was found on enquiries that at the time mentioned by the pilot she was exactly in the direction and position indicated by him, but about two hundred miles away."—*Chamber's Journal*, Feb. 1895, p. 32.

In the case of both these ships the curvature would be 26,666 feet, leaving the vessels, after making a liberal allowance for the elevation of the observer, nearly five miles *below* the line of sight.—(ED. E. R.)

## THE PUZZLED CLERIC.

By "ICONOCLAST."

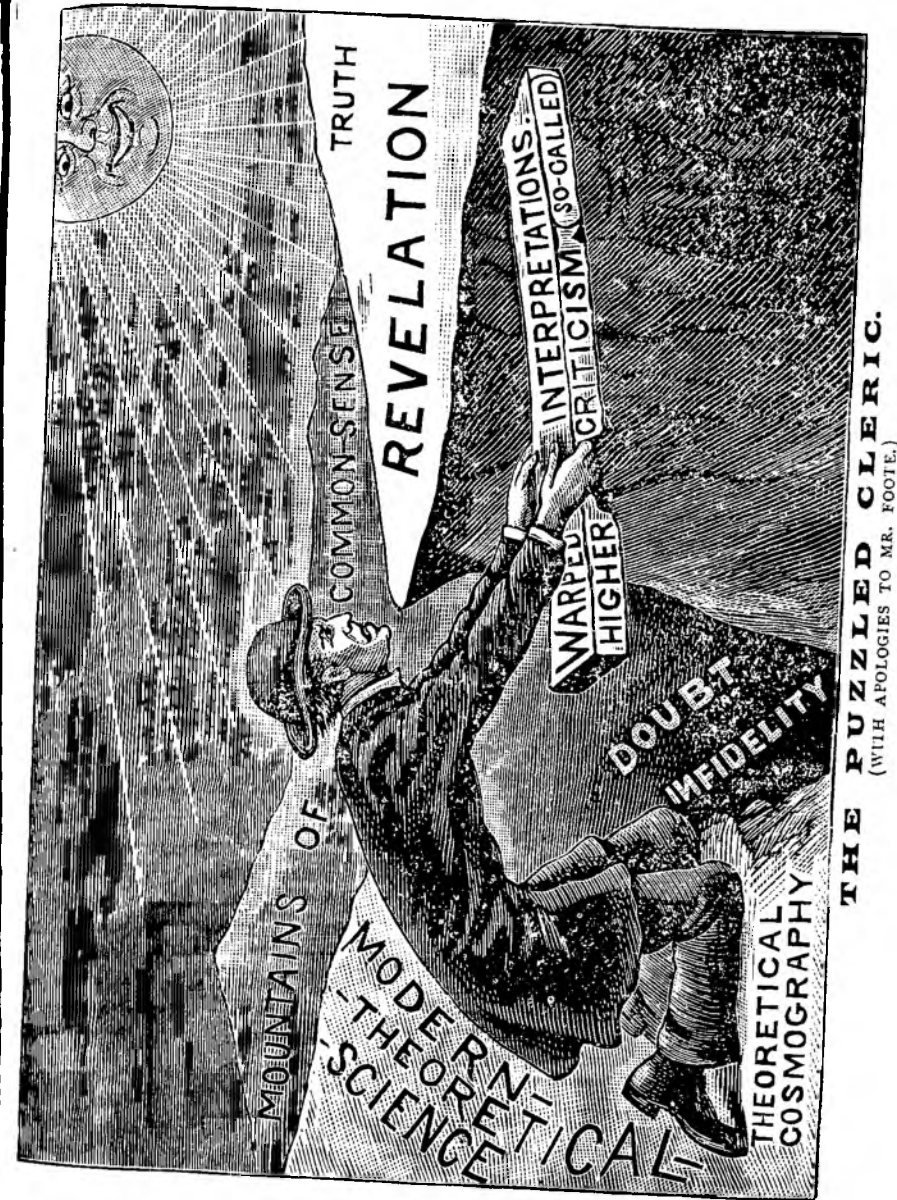
The PUZZLED CLERIC depicted in our illustration shows the quandary thousands of his calling, as well as many other sincere people unexpectedly find themselves in after expending their time in schools and colleges poring over mind-staggering literature to imbibe the numerous ASSUMPTIONS which originate in and ramify from MODERN THEORETICAL SCIENCE (so-called).

We advise all who are in this unenviable position to courageously climb back to the MOUNTAINS of COMMON-SENSE and resolutely keep to the track which leads away to the right towards TRUTH, where they will discover the solidly constructed BRIDGE of ZETETICISM, by which the ABYSS of DOUBT and INFIDELITY can be easily overcome without fear or perplexity.

Many superficial thinkers may be inclined to doubt the position of the *Puzzled Cleric*, but those who have passed through the general course of education, especially that of the Higher Grade, will admit that it cannot be successfully carried out without a large amount of MODERN THEORETICAL SCIENCE being imbibed, and in such an insidious manner that it is almost impossible for anyone destined to become an expounder of REVELATION to be otherwise than *biased* by his THEORETICAL SCIENCE training; but putting aside for the moment this particular phase of the subject and viewing it from a purely secular point, we have good authority from one of Modern Theoretical Science's most admired and belauded champions, which is condemnatory of this falsely so-called SCIENCE, we allude to PROFESSOR HUXLEY, who has candidly said, "True science is connected knowledge; connection between its conclusions and their *first principles must be capable of demonstration*, that it (True Science) differs in nothing from common knowledge, save its accuracy and *constant testing and verification*, that it *sees FACTS as they are*, or at anyrate without the distortion of prejudice, and reasons from them (the FACTS) in accordance with the dictates of sound judgment. *TRUE SCIENCE IS SIMPLY COMMON SENSE AT ITS BEST*, that is, rigidly accurate in observation, and merciless to fallacy in logic." To condense the above, we may say, true SCIENCE is positive in its character. This question therefore remains for all of us, viz. :-Is there any really positive character in MODERN THEORETICAL SCIENCE? After patiently investigating in every COSMOGRAPHICAL, ASTRONOMICAL and GEOLOGICAL direction, we are compelled to answer in the negative, as we find and *PROVE* this so-called SCIENCE nothing more than a mass of groundless ASSUMPTION and SUPPOSITION.

We will now take another glance at The Puzzled Cleric, and also think of those in a like position, quibble or sophisticate as he or they may, the bridging of the ABYSS of DOUBT and INFIDELITY, from the MODERN THEORETICAL SCIENTIFIC ground, by any amount of WARPED INTERPRETATIONS or "HIGHER CRITICISM" so-called, is as impossible as attempting to bridge the ATLANTIC with a cob-web; so called Right Reverend Fathers, Doctors of Divinity and Theology, with Professors "galore," have (honestly in many cases) attempted times out of number, to accomplish the business, with the results, that many have candidly owned themselves beaten outright, while others have sunk abashed into the Abyss of Doubt and Infidelity; and yet with all this, to as much as hint dissent from the original and generally accepted THEORETICAL PREMISS (viz. :-THE GLOBULARITY OF THE WORLD) of Modern Theoretical Science, is sufficient to raise a sneer in some, and make even those who openly *call* themselves Christians, put their tongues in their cheeks, or at most, secretly pity what they are pleased to call *THE IGNORANCE OF THE DISSENTERS*, and then complacently walk off to their various *PLACES OF WORSHIP* like so many infallible oracles or popes, with their Bibles (which contain THE TRUEST SCIENCE extant, but which they do not virtually believe in) tucked tightly under their arms, and their robes of sanctity and self-satisfaction wrapped around them, as much as to say, "thank God we are not as other men are!"

We again apologise to Mr. Foote for the use of his admirable suggestion.—  
ICONOCLAST.

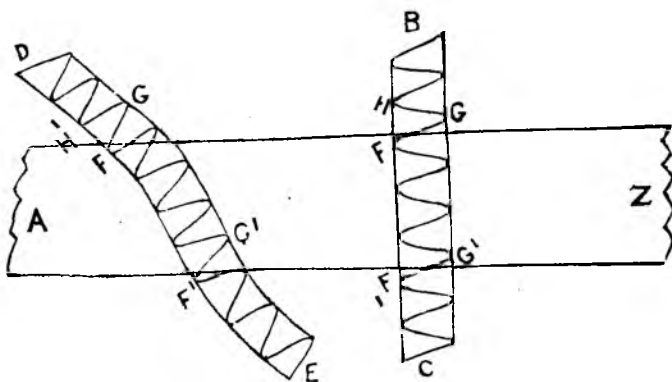


THE PUZZLED CLERIC.  
(WITH APOLOGIES TO MR. FOOTE.)

## ZETETIC REFRACTION.

By James Naylor.

In our previous paper it will be remembered that we were entirely concerned with rays of light passing obliquely through media of varying density. We now propose to consider their behaviour when passing obliquely through media whose density is practically the same. Now here the ordinary teaching is that the path described will be a right line, and change of directions take place only when the ray enters or emerges from the medium in question. But how can this be? If we think but for a moment we shall see that a ray of light when passing obliquely even through a medium of equal density must perforce describe a curve in the direction of the line of least resistance and for the following reason. A ray of light has a definite area and in passing obliquely through any medium the undulations on one side of the ray must always have a greater number of particles offered to their progress than the corresponding undulations on the other side and, therefore, will move less rapidly. This we can easily see from the diagram in our former paper which is here reproduced.



If we look at the oblique ray D E we shall see that all the undulations on the G' side of the ray are further from the surface at which they emerge than the corresponding undulations on the other or F' side. As the G' undulations have therefore relatively more force opposed to their progress than the F' undulations, their movement must of necessity be slower, and being slower cause the path of the ray to be not along a right line, but along a course whose concave side is towards the upper or G' side of the ray. In short,

the path taken would not be unlike the form assumed by a spiral spring when unequally pressed upon one side more than another where we may know experimentally that the side most pressed would assume a concave form as contrasted with the convex one taken by the side under the least pressure.

But this conclusion though a self-evident deduction from known and demonstrable premisses, is quite opposed to current teaching for as we have already stated that teaching is, that an oblique ray passing through a medium of equal density will describe a path which is approximately a right line. We must, therefore, strengthen our conclusion by illustrations and references that will leave no room for doubt as to its correctness.

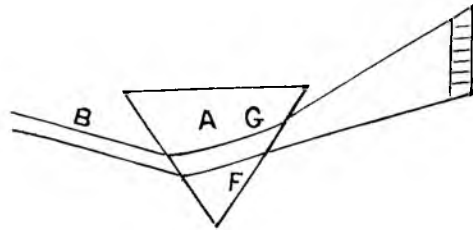
Now it is admitted on all hands that in the atmosphere refraction takes place when a ray of light passes from an object placed relatively at a lower elevation than a spectator some distance away. It is also admitted that the effect of this refraction is to cause the path described to partake of the nature of a curve whose concave side is towards the earth with the result that the object appears to the spectator higher than it really is. Now this behaviour of the ray is precisely in accordance with the conclusion we have reached and with the reasons which justify it. The undulations on the lower or concave side next to the earth have of necessity a greater number of particles of the atmosphere opposed to them at the same moment of time than their corresponding undulations on the upper side. This being so their rate of movement must be slower and hence follows the resulting curve of actual fact and knowledge.

It will be no avail to urge against our reasoning that the relative difference in the number of particles between the upper and under side of the ray is so small as to be practically of no account. For one instant of time this may be considered as true, but not when the element of time is fully allowed for. Then we have to reckon not for some slight difference at one instant of time, but for the sum of many slight differences added together.

Neither will it avail to urge the ordinary explanation that the curve we have referred to is due to differences in the density of the atmosphere between the portions occupied by the object and the one held by the spectator. That any such differences exist is not only an assumption, but is in the main incapable of proof and contrary to known atmospheric conditions. If any one will take up some recent work on Meteorology such as *Modern Meteorology*, by F. Waldo, they will soon see that the ordinary teaching of nice and even atmospheric strata beautifully superimposed one upon another and getting less dense in proportion to their distance from

the earth is a myth which has no counterpart in nature. From such a work as the one mentioned above it will be learnt that different atmospheric densities may and do exist in every conceivable direction from the horizontal to the vertical. That in fact it is quite a common thing for air of different densities to be either ascending or descending in planes both vertical to the earth and parallel with each other. This effectually disposes of the ordinary explanation by showing it does not agree with the facts. But the cause we have pointed out is one permanently operating and is both indifferent to and independent of either varying density or the direction which the density takes.

But a more conclusive illustration of the correctness of our deduction may be seen in the phenomena of the prismatic spectrum. There we know that if a ray of light is passed through an ordinary prism it will on being projected upon a suitable screen be decomposed into its component colours. Now ordinary teaching has hitherto contented itself with merely recording the fact without attempting to assign a cause for it. And yet the cause is evidently the one we have pointed out as may be seen by the following diagram.



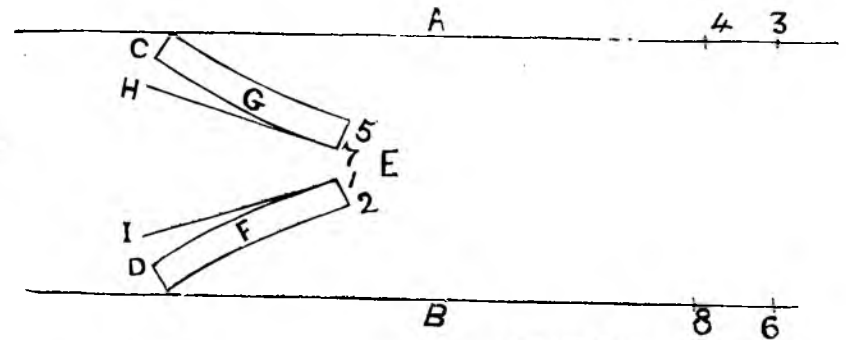
Let A be a prism through which a ray of light B is passing. Now it is evident that the undulations on the upper or G side of the ray have more particles of the glass opposing their progress than those on the under or F side consequently the path of the ray will be a curve whose concave side is towards the upper part of the prism. It is also evident that if the ray describes such a curve the upper undulations when they emerge from the prisms will do so at a different tangent of the curve than the under ones, and on being continued to the screen these different undulations will therefore of necessity travel along paths which are continually becoming more divergent as they proceed and produce at the screen the beautiful phenomena of the prismatic colours. And the prism is not the only practical illustration of our contention. Lenses, bubbles and any objects which present a greater number of obstacles to the progress of some undulations as compared with others in the same ray will produce similar phenomena as the prism. Now in all these cases it

will be found on examination that the cause we have assigned is the only one which offers a rational, scientific and self-evident explanation.

Having fairly justified our position, it will be in order to now point out some important consequences of the conclusions reached.

The first of these that we will point out is that a ray of light coming from objects higher than the observer cannot describe a curve whose concave side is towards the earth or tend to the perpendicular as ordinary teaching expresses it. If it did so it would be turning in the direction of the most, and not that of the least resistance. As we said before, a ray of light has a definite area, and if one is coming down obliquely through the atmosphere to an observer then it is clear the upper undulations would have at the same instant of time more particles of the air resisting them than their corresponding lower ones and deviation from a right line path must therefore be away from and not to the perpendicular as ordinarily taught. Further, as a consequence of this, the effect of the refraction of light from an object higher than the spectator is to seemingly depress and not elevate the observed object. This consequence is so important and contrary to received opinion that before concluding the present paper we will submit a diagram to make our reasoning on atmospheric refraction perfectly clear.

Let the lines A B represent a portion of the atmosphere of equal distance throughout from the surface of the earth. Let C and D be



the position of two objects, one above and the other below the spectator stationed at E, F and G rays proceeding from the objects. Now it is evident that if a straight line were drawn from 2 in the ray F from the lower object to 3 on the upper limit of the assumed portion of the atmosphere, it would be longer than a similar line



parallel to it, but starting from 1 in the ray and proceeding to 4 on the upper line consequently the lower line representing a longer distance would contain more particles of air than the upper and thus present a greater resistance to the progress of the ray on the lower side as compared with the upper. This would cause the ray F to tend towards the horizontal in exact accordance with the observed facts of nature. So far our argument cannot be denied. Now apply the same reasoning to the ray G from the higher object and it is seen to be inevitable that this ray would also bend towards the horizontal (not to the perpendicular as ordinarily taught) thus causing the object to appear lower and as if it were in position at H just as the former ray appeared to raise the object to I. A straight line from 5 in ray G to 6 on the lower limits of the atmosphere is plainly longer than one from 7 to 8, and necessarily the same consequences follow as before only in a contrary direction.

But the further issues of this important matter we must defer to a future paper.

## HOW OLD IS THE EARTH?

*By Alex. McInnes.*

A squabble over the earth's age lately broke out between Lord Kelvin, styled by Earl Salisbury, "the greatest of living scientists," and a Professor Perry, who disputed the infallibility of his chief. The scientific lord, formerly William Thomson, assumed, or as usual supposed, that the earth is a "homogeneous body," cooling at a fixed and uniform rate; therefore that its age is somewhere between 20 millions and 400 million years. However, the lordly dictator having published his supposition, larded over with mystical mathematics, also in words of thundering sound, what multitudes of simpletons will now gulp down the bolus without ever asking for the evidence so wholly wanting. Now, is a university professor so blind as not to see the enormous difference between 20 millions and 400 millions—viz., 380 millions, to count which at the rate of 60 per minute, 12 hours daily, would occupy 24 years of a man's life? Then, why call the vast continents making up the land or earth a body, seeing that they have neither head, legs, nor any such members; and why a body any more than a soul? But, if by earth is meant all the oceans and continents rolled together into an astronomer's imaginary globe, land being solid and ocean fluid, where is the homogeneity? *En passant*, this misuse of the words body and earth are but specimens of the wholesale verbal jugglery practised by scientists to cause mental con-

fusion and darkness. Moreover, the Glasgow professor to make the earth's age what he pleases has only to assume the rate of cooling accordingly. Yet the 400 million years being too paltry a period for the evolution fable, Professor Perry rejects the supposition of cooling, and assumes that the earth's centre is now in a highly molten state, and with as much confidence as if he had been down in the infernal regions making a personal inspection, whilst Lord Kelvin assumes a familiarity with the earth's primeval conditions as if he had witnessed the Creation.

Is not the fabulous chronology after all like the ocean-land-globe, a mere heirloom of ancient heathendom? The Japanese and Chinese to make chronology square with their abominable Buddhism suppose 3 million years for the earth's duration, the Hindoos for Brahminism 6 millions; and now Professor Thomson to please the atheistic evolutionists is even willing to grant 4,000 million years as the greater limit, thereby confessing a blunder of 3,600 millions!

Further, the scientists can see nothing to admire beyond or above what they call nature, that is, the visible Creation, which by *their assumption* is its own Creator—having had an eternity of ages to revolve sun, moon, stars, oceans and continents out of an *imaginary* fiery gas—a god unaccounted for; life out of death, order, beauty, light out of darkness and chaos; many thousand kinds of plants out of granite; thousands of kinds of beasts, birds, fishes, insects, out of cabbages, trees, &c., and man out of no one knows which kind of monkey! Still this goddess Nature is confessed to be as helpless as the puppet of a punch and judy show, being entirely dependent on mythical laws which act with an energy too omnipotent for Nature to resist, and she is pulled, whirled, tossed, evolved, exploded, just as these mythical laws please. Again, the laws themselves are under a necessity of operating according to rules, fixed how, why or when, no one knows; yea, unchangeable, at least, since tadpoles grew out of cabbages to father our ancestral apes, gorillas or baboons. *But whence the INVOLUTION that must have PRECEDED the EVOLUTION* is another nut too hard for scientists to crack!

Is it hard with such cunning fables to deceive the multitudes so debased by the lying stories and abominable idle gossip of newspapers and like literature? And though foolish editors may jest at Moses, yet the Pentateuch still stands the oldest historical monument, so well authenticated and so full of unassailable internal evidence—so plainly endorsed by Jesus whose well attested Christhood no lover of truth can deny. With the date of Creation given in Genesis, as well as the Patriarch's ages, along with periods of time given by the sacred Hebrew historians following Moses, we may cal-



culate down to the first year of Cyrus, where we are assisted by Josephus and Greek historians, thereafter by an unbroken chain of literature down to the present year, eclipse and transit cycles confirming all. Hence we know that about 6,000 years ago God said "Let there be," and there was.

In Dr. Dick's "Natural History" we have a specimen of the Geological method of calculating. He *supposes*, of course without any proof whatever, that God did not make the bed of the Niagara, but that that river cut for itself the passage of six miles below the falls; and further *supposing* the Niagara to cut one foot yearly, he concludes it must have been so working for 31,000 years, but if it cuts, as others *suppose*, one inch yearly, we have more than 300,000 years as the present or quartary period. Next he *supposes*, still without proof, that the underlying systems, the tertiary, secondary, primary, primordial rocks, represent as many antecedent periods of time. So, the quartary being 500 feet thick, and the tertiary 3,000 feet, we have six times 31,000 years or six times 300,000 years to add for the earth's duration. Again, the thickness of the secondary rocks being 15,000 feet their period must be 30 times that of the present; whilst the thickness of the primary is three times, and that of the primordial five times that of the secondary. Therefore, the earth's age is somewhere between  $8\frac{1}{2}$  millions and about 100 million years; without taking into account the unknown period of the igneous rocks. However, we know from Genesis 1 that God made all things in six days, all the rocks on the third day, in strata according to Job xxxviii. 5; therefore, granting the Niagara to cut one inch yearly it must since the creation have worn away only 6,000 inches or 50 feet.

Accordingly, shall we compute the earth's age by the vague and contradictory guesses of fellow worms called geologists, or by the authority of the Creator Himself?

## SCIENCE'S QUARREL WITH THE BIBLE.

*Extracts from Lectures by* WALTER ROWTON, Esq.

Without, so far as I can see, a single fact in support, it has been assumed that *man's earliest ideas of a God*, of his own origin, of the *earth's age and form*, of the sun, moon, and stars, *originated with himself*; that the *cosmogony by Moses, if he wrote Genesis*, was a mere jotting down of ignorant doctrines in themselves—the residuum of *speculative traditional ideas* which had been afloat in the world for ages: ages whose backward reach did not terminate at Adam, but

whose years in the aggregate, with their *lost records of pre-Adamic man*, most probably amounted to millions.

*But*, on the other hand, *there is a Book*, believed to be the oldest in existence, which *distinctly ascribes all man's knowledge of God*, himself, and the universe to the Divine Being; *not* as it would seem *superstitiously*, but *because such was the matter-of-fact experience of the then good men*, and among them of those whose histories in part this record gives.

Because the Book of *Job* happens to be one of the books of the Bible, is it, as *evidence worthless*? Please to remember that in *Job's day there was no Bible*. You must consider therefore the history given as it originally stood, by itself; having none of our theories to advocate, and none to oppose; knowing, in short, nothing whatever about them.

*Job's one discreet friend, Elihu, said*, "The Spirit of God hath made me, and the breath of the *Almighty* hath given me life." (Job xxxiii. 4.) How did he know that; not a line of the Bible being then in existence?

Was it *borrowed from the heathen*? We have no right to *assume* that so far there had been any heathen worship, excepting of the sun and moon.

Was the notion *human*? From its *sublimity it would seem not*. *The highest capability of notions, purely human*, has not at any time shown *itself equal to higher conceptions than the invention of atomism*. *culminating in Darwinism*. Whenever men have left these conceits in search of higher, their exploration resultless, they have had to return to them again. And the latest return was but yesterday.

Was Elihu's notion a tradition? Perhaps; but its source seems more probably God Himself than man: for the latter, cultivated as he may be, *whenever he gets away from the gross worship of idols, never witnesses for anything more definite than an "unknown God"*; a supposed, not a perceived or realised Being. Again: this, if tradition is traceable to God rather than man; because the world's tendency has ever been to prefer a god or god's of its own invention; *it has always objected to a revealed God*. And again: this, if tradition, is traceable to *God rather than man*, because of its *many subsequent reiterations*, to all appearance officially, *naming Him as the Authority*.

Was it to Elihu an unauthenticated tradition? There are good reasons for thinking it was not. Remembering that the *inhabited earth according to the usual computation*, was in existence for some *2500 years before Moses wrote in God's name* to His chosen people—were these all that while left to their own notions? Were they without communication of any kind from the God they are stated to have first

known in Eden, and to have thenceforward acknowledged? The evidence of the *book of Job* is, that the *relations of God with good men were as realisable then as at any subsequent time* of which we have particulars. So on the face of it we might infer; otherwise it seems impossible to account for *their religion having remained wholly uncorrupted for 2,500 years*: Job's religion and that connected with the garden of Eden being as much one as though no interval had occurred. Before the Christian era, the most *difficult thing men ever tried was the remaining true to the unseen God*. Left for awhile to themselves, the bulk of them *invariably forsook Him for the worship of idols*, and preferably idols of their own making. *Moses but forty days absent*, and down went the Israelites before a golden calf! Repeatedly convinced that God was, directly He intermitted confirming His existence by signs and wonders, that instant men began to doubt His being and withdraw from His worship. Again and again shown that *Dagon fallen upon his face*, his head and hands cut off, and only the *stump of Dagon left to him*, (1 Sam. v. 3, 4), was nothing in the world but a *sorry cheat*, yet they *set Dagon in his place again and bowed to him as usual*. Yes; even the children of Israel, who in this respect actually did *worse than the heathen* "whom the Lord had destroyed before them" (2 Chron. xxxiii. 9)! These seem to be the common *instincts of men*—and especially of those whose melancholy fallings away from Aaron to Zedekiah are so minutely recorded in the Bible—I say that the *unswerving loyalty of the unseen God's worshippers for 2,500 years, from Adam to Moses*, is quite inexplicable unless the record be true; unless God, before a line was written in His name, really had the *constant communications* He is stated to have had with the *elect families* who professed His service. How was it that *Job*, towards the end of those 2,500 years, *although tried to the utmost of human endurance, never once thought of denying God*? How was it there was *not a single unbeliever* in God amongst those "*miserable comforters*" who did their best to alleviate by aggravating his calamities? It is impossible to account for it, except upon the hypothesis that the Being of God was, in those days, so *indisputably confirmed to His worshippers by the habitual intercourse he is represented to have had with them*, that denial of His being was simply out of the question. Had *Job's religion* been merely the *inorganised superstition* it is the fashion to consider it, *severely tested as it was*, and with nothing tangible to hold it together, surely, so empty, so powerless, so comfortless a sham would not have retained his allegiance for an hour.

How is it that those we esteem our greatest philosophers seem quite *unable to talk science without venting second-hand sarcasms at the*

*expense of men's religious delusions*? I say "second-hand sarcasm," for whence gained they their superlative contempt? Every jot of it from the Bible! Who has denounced the imbecilities of superstitious worship with such withering scorn as the Bible's God? *He* not a whit more real than the Baal he proves a myth! So indeed they tell us; but from such *sticklers for law we expect conclusions according to evidence, not contrary*. Whether they accept the *Bible as from heaven or of men*, this much is proved: its writers were as free from superstition, and as much alive to the follies of visionary and spurious religions, as the most enlightened free-thinker who ever lived.

Agreeably, then, with the marvellously concurrent testimony of the *Book of Job* and the *Book of Human Nature*, it appears that Elihu knew God had made and given him life; not of his own knowledge, but by reason of that information having been God's revelation: first, perhaps to his ancestors, and confirmed from their day to his own.

If this be true, there should, one would think, be contemporaneous statements and evidences establishing that God gave it, and how it was given. Well, there are such statements and evidences.

(To be continued.)

#### The Contents of our Letter Box.

To the Editor, "Earth—not a Globe—Review."

Dear Sir,—Lady Blount and myself have the pleasure to inform you that our Valse, "The Earth not a Globe," or "The Nebular Hypothesis"\* having been set to music has been played at the Crystal Palace by Godfrey's Military Band. It was played there *again* to-day, May 3rd, and her ladyship had notice, and both attended to hear it. It was well executed, and as you no doubt imagine gave us great pleasure, not alone for the music, but in having the subject made so prominently public.

We trust it will make a good impression and draw attention to a matter of such great importance. Zetetics should ask Mr. Godfrey when he next plays the Valse, enclosing P. C. for a reply.

Enclosed please find to-day's Crystal Palace Programme.

Yours faithfully,

W. T. WISEMAN.

Copied from Programme.

Bandmaster—Mr. CHAS. GODFREY, Jun.

5. Valse ... "Earth not a Globe."

W. T. WISEMAN & LADY BLOUNT.

LEEDS. Dear Sir,—I notice in the tract entitled, "One of the Devil's Masterpieces" the following assertion. "Any six miles of standing water can be proved by practical demonstration to be horizontal and entirely without the dip that would be required by a globe of 25,000 miles in circumference, viz., 24 feet."

On referring to *Cassell's Popular Educator* (vol. I. page 62) I find among other proofs of the rotundity of the Earth the following:—"In 1870 a convincing experiment to prove this point was made by Mr. Wallace in the Bedford Level. Three signals, each 13 feet 4 inches above water level, were erected at distances of three miles apart. On looking through a telescope so adjusted that the line of sight touched the top of the first and last poles, it was found that the middle signal was more than five feet above the line." Can you reconcile these discrepancies? and oblige, yours truly, J. E. GREEN.

No, we cannot reconcile these discrepancies, but we can speak the truth about them. We reproduce upon the cover of this issue of our Journal the

\* See *E. R.* No. 7. page 157.

diagrams which appeared in *The Field* newspaper of March 26th, 1870, and offer a gift of a £10 note to anyone who will prove the existence of "three" or even two "poles" from the diagrams of Mr. Wallace's referee. There are many absolutely false statements made about the experiment, in one before me now, I read that there was "three discs rising 12 ft. above the level of the surface of a piece of water large enough to shew curvature if there was any." Another account says, "three boats were built specially for the purpose with masts that stood exactly the same height above the water. These were placed on the canal, one at each end and one in the middle." Another account says, "Over this canal are three bridges of like height and appearance, one at each end and one in the middle. A telescope was placed on one end bridge and levelled, an object was similarly placed on the other end bridge and was seen *under* the middle bridge thus shewing the centre bridge to be on a sort of crest." With such false and contradictory assertions what does; yea, what can the world know about the facts of the Bedford Canal Experiment (?) of 1870?

ABSOLUTELY NOTHING.

Dear Sir,—In reference to my pamphlet which you advertise in the "E. R." Mr. Harpur says, "It is a sensible and temperate work, and makes that mysterious piece of hocus-pocus, the Zetetic law of perspective, more plausible than I have elsewhere seen it made. But, like other Zetetic works, it fails to answer the question why are the lower three yards of mast still visible when three yards of hull have vanished?"

To this I reply, the three yards of mast *might* be still visible or they *might not*!"

I cannot think for a moment that Mr. Harpur has ever tried the experiment or he would be able to give the height of the observer's eye, and also the height of the ship's hull. These are *sine-qua-non* items.

If the eye were five feet above the water and the hull ten feet high, then *only* the

hull would be invisible at the horizon, because its height would measure five feet below the eyeline and five feet above it. This would be, in effect, the same as if an observer were stationed midway between two railway lines ten feet apart. The two lines would, if seen far enough, *appear* to meet at the same spot; and this spot would also be the vanishing point for an object ten feet in length, stretching from one point to the other: that is *five feet on each side of the observer's eye*. This explains how a ship's hull ten feet high would disappear.

Mr. Harpur believes too much in what others tell him; for he says, "several seamen whom I have questioned, all deny that a telescope will bring a vanished hull back to sight." But I can speak from experience, and distinctly affirm that I have many times seen a vanished hull reappear; although there are certain conditions which sometimes make such a result impossible. Let Mr. Harpur try the experiment himself with a good telescope and a quiet sheet of water. He will then be able to see that the "old salts" have (unintentionally Ed.) misled him.

WM. BATHGATE.

Sir,—Several disparaging remarks have been brought to my notice regarding an article in the last number of the *Review*, entitled, "A Genius on the Globe," by a correspondent named H. H. Scroggins, some asserting the article as being a "species of mud-throwing," or "insulting" "scurrilous," "foolish," etc., etc. Now although the article may not rise to the acme of excellence from a literary point, yet the spirit it is written in, is not (in my opinion) a tittle too ridiculous or satirical considering what is alluded to. "The schoolmen's sham-globe and fraud" especially deserves all the ridicule it is possible to bring against it, and I trust those who are so mercifully thin-skinned towards "globeism" by finding fault with the article in question, will in future, re-

member that when deepseated errors are to be rooted out *any* reasonable method should be admissible.

I am, Sir,

Respectfully yours,  
T. LONGSIGHT.

Dear Sir,—Just a line to inform you how much I have enjoyed the perusal of our last *Review*. Friend Scroggins' article is very good, his scathing denunciation of

Science falsely so-called is true, though rather severe, perhaps he believes in the Apostolic injunction, "rebuke them *sharply*." What a pity it came on to rain, he evidently has an idea that the fish were made for him rather than disporting themselves in their native element.

Yours truly,

G. T. B.

### Answers to Correspondents.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o Mr. J. WILLIAMS,  
32, Bankside, LONDON, S.E.

O.A.K. AND OTHERS.—Accept our thanks for copies of *Zion's Watch Tower* for May. We *may* notice the Editor's criticisms on "Bible Astronomy," in our next issue.

J. ATKINSON.—Thanks for your answer to question 5. Through lack of space we have been compelled to omit The Zetetic's Open Column this issue. We have no end of interesting and important matter that we are eager to place before the world, but we must be assisted by Zetetics to issue our Journal Monthly before we can do so. Who will help?

D. YEOMANS.—Hearty thanks for your question which shall appear in our next. Thanks also for subscription towards a block for a Map of the World.

ICONOCLAST.—Thanks for *Reynolds' Newspaper*. We hope to start a series of Papers on Gravitation in our next issue. We commend the perusal of them to "Do-do" as we shall shew that "the fact of Gravitation is owned by globularists to be a 'Universal Nightmare!'" "Do-do," watch it, and *believe* what your globular schoolmen are themselves telling you, and *then* you will see "how so many persons in this country can spare time to make fools of themselves."

T. WHITTLE.—Thanks for your communication, which shall appear in our next.

C. HARPUR.—We are glad to see you own that Capt. Forman pointed out a real mistake in orthodox astronomy, viz:—"That on an earth which is not a perfect sphere, plummets cannot all tend towards one single centre." There is no doubt but that he utterly "vitiates the evidence for the *supposed* flattening at the poles," that is *why* we printed his article. When will you see that the whole of "orthodox astronomy is nothing but a tissue of suppositions," each supposer contradicting every other supposer's suppose, supposing that his suppose is not a suppose at all, but absolute truth! Re-gravitation. See our reply to Iconoclast.

- T. WINSHIP.—Thanks for *The Cape Magazine*. We hope you will continue to write to it on "Natural Cosmogony." We wish you God speed in the propagation of truth. We shall be glad to see Mr. Dunn's reply, if he attempts to answer such practical facts as you have brought before the readers of so racy a magazine.
- R. ALFREY, J. T. DINES, AND OTHERS.—We deeply regret our inability to insert your interesting letters on account of lack of space. They shall appear at the earliest opportunity.

### EDITORIAL NOTICES,

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec. post free to any address in the postal union for 10d. per year, in advance.

All monies for the Society must be paid direct to the local Vice-Secretaries, or direct to the Hon. Secretary and Treasurer, Jno. Williams. Post Office Orders to be made payable at Summer Street. S.E.

### MAP SUBSCRIPTION LIST.

Mr. D. Yeomans	..	..	..	£	0	7	6
Mr. Levi Chilton	...	...	...	0	1	0	

Will subscribers whose subscriptions are now due kindly forward them to the Hon. Secretary with as little delay as possible.

### A TESTIMONY.

THE EARTH—not a Globe—REVIEW is deserving of especial notice by Scientists and Astronomers. Its contents are both convincing in evidence and logical in conclusion. The philosophical reader of such a work is brought face to face with proof and deep investigation of all that scientists and theologians have advanced, and with a plausible argument shewing that the earth is not a globe.—*The Torch*, May 1895.

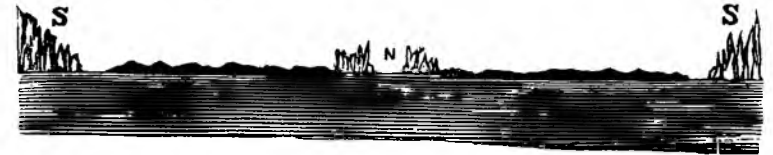
### In Memoriam.

We regret to announce the death of our esteemed friend J. STEER CHRISTOPHER, who, on account of his Map of the World as a Plane, was made a "Fellow of the Society of Science, Art and Literature." Born at Dartmouth, April 15th, 1805, fell asleep in Jesus at Morden College, Blackheath, December 31st, 1894, and was interred at Charlton Cemetery, January 3rd, 1895. A stone to his memory will shortly be erected, on which will be inscribed:—

"I shall be satisfied when I awake with Thy likeness."—Ps. xvii. 15.

# THE EARTH—NOT A GLOBE—REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

NO. 5 (NEW SERIES). OCTOBER, 1895.

PRICE 2D.

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

By LEO CASTLE.

(Dedicated to the Editor of REYNOLD'S NEWSPAPER)

"All true interpretations of Nature must be made by suitable and proper trials in which THE SENSES judge by EXPERIMENT ONL EXPERIMENT being the judge of Nature and Fact."—LORD FRANCIS BACON

*"Does not the foolish deference we pay  
To men who lived long since our passage stay?  
What odd, prepost'rous paths at first we tread!  
And learn to walk by stumbling o'er the dead.  
The rev'rend sage with vast esteem we prize,  
He lived long since, and must be wond'rous wise.  
Good Heavens! that man should thus himself deceive,  
To learn on credit, and on trust believe!"*

Reason, By POMFRET

"The multitude will not feel so inclined to persist in worshipping an idol when they see it pulled down from its pedestal and degraded with impunity in their presence."—*Essay on Reverence*.

Extract from *Reynold's Newspaper*, April 7th. 1895.

Those who believe the world is flat have a Journal of their own, called the *Earth Review*, which has been forwarded to me. Some people, as the late actor, Charles Matthews, used to say, are so dogmatic as to deny that there is another side to the moon, and the flattists, or zetetics as they call themselves, will not have it that there is such a thing as globularity. I am myself prepared to believe that the world is round until somebody disproves that the law—or, I would rather say, the fact—of gravitation is a sham and the science of astronomy

- T. WINSHIP.—Thanks for *The Cape Magazine*. We hope you will continue to write to it on "Natural Cosmogony." We wish you God speed in the propagation of truth. We shall be glad to see Mr. Dunn's reply, if he attempts to answer such practical facts as you have brought before the readers of so racy a magazine.
- R. ALFREY., J. T. DINES, AND OTHERS.—We deeply regret our inability to insert your interesting letters on account of lack of space. They *shall* appear at the earliest opportunity.

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec. post free to any address in the postal union for 10d. per year, in advance.

All monies for the Society must be paid direct to the local Vice-Secretaries, or direct to the Hon. Secretary and Treasurer, Jno. Williams. Post Office Orders to be made payable at Sumner Street. S. E.

### MAP SUBSCRIPTION LIST.

Mr. D. Yeomans	..	..	..	£0 7 6
Mr. Levi Chilton	...	...	...	0 1 0

Will subscribers whose subscriptions are now due kindly forward them to the Hon. Secretary with as little delay as possible.

### A TESTIMONY.

THE EARTH—not a Globe—REVIEW is deserving of especial notice by Scientists and Astronomers. Its contents are both convincing in evidence and logical in conclusion. The philosophical reader of such a work is brought face to face with proof and deep investigation of all that scientists and theologians have advanced, and with a plausible argument shewing that the earth is not a globe.—*The Torch*, May 1895.

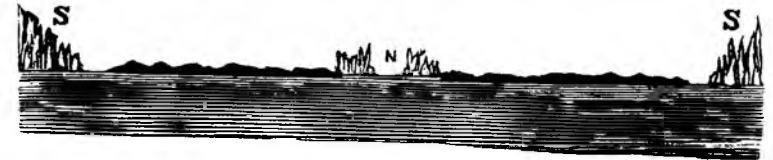
### In Memoriam.

We regret to announce the death of our esteemed friend J. STEER CHRISTOPHER, who, on account of his Map of the World as a Plane, was made a "Fellow of the Society of Science, Art and Literature." Born at Dartmouth, April 15th, 1805, fell asleep in Jesus at Morden College, Blackheath, December 31st, 1894, and was interred at Charlton Cemetery, January 3rd, 1895. A stone to his memory will shortly be erected, on which will be inscribed:—

"I shall be satisfied when I awake with Thy likeness."—Ps. xvii. 15.

# THE EARTH—NOT A GLOBE—REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

No. 5 (NEW SERIES). OCTOBER, 1895.

PRICE 2D.

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

By LEO CASTLE.

(Dedicated to the Editor of REYNOLD'S NEWSPAPER)

"All true interpretations of Nature must be made by suitable and proper trials in which THE SENSES judge by EXPERIMENT ONL EXPERIMENT being the judge of Nature and Fact."—LORD FRANCIS BACON

*"Does not the foolish deference we pay  
To men who lived long since our passage stay?  
What odd, prepost'rous paths at first we tread!  
And learn to walk by stumbling o'er the dead.  
The rev'rend sage with vast esteem we prize,  
He lived long since, and must be wond'rous wise.  
Good Heavens! that man should thus himself deceive,  
To learn on credit, and on trust believe!"*

Reason, By POMFRET

"The multitude will not feel so inclined to persist in worshipping an idol when they see it pulled down from its pedestal and degraded with impunity in their presence."—*Essay on Reverence*.

Extract from *Reynold's Newspaper*, April 7th. 1895.

Those who believe the world is flat have a Journal of their own, called the *Earth Review*, which has been forwarded to me. Some people, as the late actor, Charles Matthews, used to say, are so dogmatic as to deny that there is another side to the moon, and the flattists, or zetetics as they call themselves, will not have it that there is such a thing as globularity. I am myself prepared to believe that the world is round until somebody disproves that the law—or, I would rather say, the fact—of gravitation is a sham and the science of astronomy

habitually incorrect. The flattists seem to me to be on a par with the explorers of fourth dimension space. It is wonderful how so many persons in this country can spare the time to make fools of themselves.—*Reynold's Newspaper, April 7th, 1895.*

It must be conceded by those acquainted with the Theory of Gravitation, as formulated by Sir Isaac Newton, that it is in a very unsatisfactory condition. This no doubt is due to the fact that EXPERIMENT, the ABSOLUTE ESSENTIAL of all true philosophy, was not thought to be a necessary element in the formation of this scientific hypothesis. Hence, in a practical investigation concerning this so-called "law of nature," it is absolutely necessary that the literal evidence of our God given senses be not utterly ignored! This also is true in respect to the meaning of words and sentences! The aim and objects of TRUE PHILOSOPHY should be to both guard and fortify our minds against all speculating ideas; but alas the popularly accepted philosophy is absolutely nothing but speculations or guesses, hence, what is termed "the progress of astronomy" is nothing more than one speculation supplanting a previous speculation, which in its turn is supplanted by another speculation! This is the essence of (so-called) science! Lord F. Bacon proves himself to be a student of human nature as well as philosophy. He says, "IMAGINARY systems of philosophy derive no small charm; for to the human mind, the fictitious drama is more attractive than true history."

We trust that the exposure we shall give in this series of papers will cause every lover of truth to join issue with us in dissenting from, and protesting against the false and illogical conclusions deduced from the FALL of an apple in an orchard at Woolsthorpe. The importance of this theory to the Copernican system of astronomy, will be clearly seen from the fact that Lardner informs us that it "resulted in nothing less than a complete discovery of the system of the World." Therefore it necessarily follows that if the accepted theory of gravitation is PRACTICALLY DEMONSTRATED to be an unfounded piece of guess work, having no foundation in Nature or Fact, then the whole system of Modern Theoretical Science must fall to the ground like an house of cards, leaving nothing to mark its existence, save it be that which marks the bursting of a soap bubble.

Before proceeding further I would here say, that while names must necessarily be cited in these articles, we cast no aspersions at any person. We believe that scientists are actuated by the purest of motives in all that they have, and are doing, but at the same time they are verily guilty, with the rest of the world which accepts the system of modern astronomy; of neglect and indifference, in that they have; to use the confession of Herschel, "TAKEN FOR GRANTED at the outset, the Copernican system of astronomy." We most earnestly desire that official astronomers and geographers would, without educational bias, examine the vital elements of their "system of the universe," and we feel sure that they would come to the same logical conclusions propounded both by Lock and Bacon, viz., "The certainty of conclusions can never rise beyond the certainty of the premises upon which they are built," and, "if the origin from which a system of philosophy is derived be a false and erroneous one, WHATEVER emanates from IT must of necessity be false also."

Concisely, the theory of "Universal Gravitation" is thus expressed:—

Every particle of matter attracts every other particle of matter; and, in proportion to the density of a planet,\* is its power of attraction; and the greater is this power of attraction the nearer each body approaches the other.

\* Seven Planets belong to the sun—the earth is one.

We will now proceed to enquire:—

IS THERE IN THE UNIVERSE ANY SUCH "FORCE" OR "LAW" AS THE "LAW OF GRAVITATION"?

Our answer; with that of many "eminent scientists," whose evidence we shall adduce in confirmation and justification of our position and protest: is, NO, DECIDEDLY NOT. This our negation is founded, as will eventually be seen, upon PRACTICAL INVESTIGATION, But first we shall adduce the evidence of scientists.

1st.—C. Vernon Boys, Esq., F.R.S., A.R.S.M., M.R.I., in his paper, "The Newtonian Constant of Gravitation" says, "G, represents that mighty principle under the influence of which every star, planet and satellite in the universe pursues its allotted course. Unlike any other known physical influence, it is independent of medium, it knows no refraction, it cannot cast a shadow. It is a mysterious power which NO MAN CAN EXPLAIN, OF ITS PROPAGATION THROUGH SPACE, ALL MEN ARE IGNORANT . . . I cannot contemplate this mystery, at which we ignorantly wonder, without thinking of the altar on Mars' hill. When will a St. Paul arise able to declare it unto us? Or is gravitation, like life, a mystery that can never be solved?"

Proceedings of the Royal Institution of Great Britain, March 1895, p. 355.

2nd.—Professor W. B. Carpenter, C.B., F.R.S., in his paper, *Nature and Law*, says, "The first of the great achievements of Newton in relation to our present subject, was a piece of purely Geometrical reasoning. ASSUMING two forces to act on a body, of which one should be capable of imparting to it uniform motion in a straight line, whilst the other should attract it towards a fixed point in accordance with Galileo's law of gravity, he demonstrated that the path of the body would be deflected into a curve . . . The idea of continuous onward motion in a straight line, as the result of an original impulsive force not antagonised or affected by any other—formularised by Newton as his first 'law of motion'—is not borne out by any acquired experience, and does not seem likely to be ever thus verified. For in no experiment we have it in our power to make, can we entirely eliminate the antagonising effects of friction and atmospheric resistance; and thus all movement that is subject to this retardation, and is not sustained by any fresh action of the impelling force, must come to an end. Hence the conviction commonly entertained that Newton's first 'law' of motion must be true, cannot be philosophically admitted to be anything more than a probability . . . WE HAVE NO PROOF, AND IN THE NATURE OF THINGS CAN NEVER GET ONE, OF THE ASSUMPTION OF THE ATTRACTIVE FORCE EXERTED BY THE EARTH, OR BY ANY OF THE BODIES OF THE SOLAR SYSTEM, UPON OTHER BODIES AT A DISTANCE. Newton himself strongly felt that the impossibility of rationally accounting for action at a distance through an intervening vacuum, was the weak point of HIS system. All that we can be said to know is, that, which we learn from our own experience. Now, in regard to the sun's attraction for the Earth and Planets, WE HAVE NO CERTAIN EXPERIENCE AT ALL. Unless we could be transported to his surface, we have no means of experientially comparing Solar gravity with Terrestrial gravity; and if we could ascertain this, we should be no nearer the determination of his attraction for bodies at a distance. THE DOCTRINE OF UNIVERSAL GRAVITATION THEN, IS A PURE ASSUMPTION."—*The Modern Review*, Oct., 1880.

3rd.—In "Letters to the British Association" Professor Bernstein says, "The theory that motions are produced through material attraction is absurd . . . Attributing such a power to mere matter, which is PASSIVE BY NATURE. is



a supreme illusion . . . it is a lovely and easy theory to satisfy any man's mind, but when the *practical test* comes, it falls all to pieces and becomes one of the most ridiculous theories to common sense and judgment.

I agree with you (R. Stevenson, Esq.) that if the power of material attraction existed, it would indeed be a wonderful miracle. Such a condition as laid down by Sir Isaac Newton's law of gravitation would disprove all natural phenomena . . . To ascribe, for instance, the flow and ebb of the tides to the attraction of the Moon is clearly absurd . . . To prove positively that the motions of the Universe cannot be produced by attraction, I will hinge three magnetized globes in such a manner, that they should in their revolving motion attract each other, and thereby prove that a motion as natural as that described by the Sun, the Earth and the Moon, can never be produced by a mutual material attraction as described and taught in Universities and Colleges. The whole theory of attraction, and all scientific problems as believed by mankind, is not only a fable, but a fake, great enough to destroy God, Truth and Common-sense, and will, and must, sooner or later, fall. It is clear that all theories based on gravitation in the scientific world are lame and perverted. Material attraction is surely one of mankind's nightmares; THERE IS NO UNIVERSAL ATTRACTION OF MATERIAL MATTER. All and every phenomena incomprehensible to common-sense, is, and will remain a fake. Mere theories that within millions of years things will be this way or that way are ridiculous guesses."—*Transportation*, Nov., 1894.

4th.—Sir Richard Phillips in his *Million of Facts* (p. 371) says, "It is a principle never to be lost sight of, that circular motion is a necessary result of equal action and re-action in contrary directions; for the harmony would be disturbed by variation of distance, if the motions were rectilinear. The same distance, that is, the same action and re-action, are, therefore, only to be preserved by reciprocal circular motions. NO ATTRACTION AND NO PROJECTILE FORCE ARE THEREFORE NECESSARY, and THEIR INVENTION must be regarded as BLUNDERS of a superstitious age . . . If the bodies came near while moving *the same way*, there would be no mutual *re-action*, and they would go together for want of re-action, and not owing to that MECHANICAL IMPOSSIBILITY, called attraction."

5th.—Professor Airy informs us that, "Newton was the first person who made a calculation of the figure of the earth on the theory of gravitation. He took the following SUPPOSITION as the ONLY one to which his theory could be applied. He ASSUMED the earth to be a fluid. This fluid matter he ASSUMED to be equally dense in every part . . . For trial of his theory he SUPPOSED the ASSUMED fluid earth to be a spheroid. In this manner he INFERRED that the form of the earth would be a spheroid in which the length of the shorter is to the longer, or equatorial diameter, in the proportion of 229 to 230."—*Lectures on Astronomy*, 5th, Ed., p. 194.

*To be continued.*

#### SCIENTISTS DISAGREE!

"The shifting of the earth's axis of rotation is a potent influence, for any astronomical revolution of this kind would at once produce a new equator, and a change of the latitude of all points on the earth's surface, except where the old and new equators intersect. This doctrine is a favourite one with geologists, since it at once explains numerous climatic changes. But astronomers are *not* quite so unanimous."—*Science Notes*, June 15th, 1895.

## GEOGRAPHERS IN CONGRESS.

By LADY BLOUNT, F.B.P., etc., and W. T. WISEMAN, F.R.G.S., F.B.P., etc.  
(Members of the Sixth International Congress, London, 1895).

### *Antarctic Exploration.*

"Even great Astronomers do not always escape erroneous conclusions, and sometimes they have to recant absolute mistakes of reasoning and calculation."

"For several thousand years people supposed that the earth was a great platform surrounded by the sea."

"They certainly knew nothing of the real shape of the earth."

"David who lived a good while before Homer, did not speak of the 'round world.' There is no such word as 'round' in the original Hebrew, nor in our Bible version of the Psalms."

"The common Latin phrase for the earth, '*orbis terrarum*,' and in the Latin Vulgate Bible, translated 'The round world,' does not mean a globe, but a round disc, or wheel."

SIR EDMUND BECKET, BT., "*Astronomy*," 7th Ed., *preface* p. 5. pp. 1-2.

According to the above quotations, astronomers are sometimes erroneous in their calculations, reasonings, and conclusions. Yet with unproved and unproveable assumptions, they have the audacity to contradict the God-Inspired writers of Holy Writ; and practically deny the cosmical teaching of Moses, and the declarations contained in the Psalms, and in the Prophets; concerning The Sun, The Moon, The Stars, and The Earth. Thus making the God-sent Messiah (in whom many of them profess to believe), a liar! Disregarding the fact, that this same Messiah, the Prince of Prophets, and the Coming King of all The Earth, endorsed "Moses, The Psalms and The Prophets." The declaration that for thousands of years, men knew nothing of the real shape of the Earth, is not supported by an atom of proof. What do moderns know of its shape? They have never been to, and consequently have never seen, beyond the circumferential ice-barriers, that surround the southings, and yet they say, "The Earth is a whirling Globe."

We now present our readers with a few sentences, culled from the Geographical Congress official papers, dated Monday, July 29th, 1895, and also from the London Daily Newspaper reports, of its meetings in its issues of July 30th.

"The sixth International Congress resumed its session yesterday in the Imperial Institute. Section A presided over by Mr. Clement Markham was devoted to . . ."

## POLAR EXPLORATION.

Dr. G. Neumayer (Hamburg), dealt with the 'Scientific Exploration of the Antarctic Regions.' He said *inter alia* :—'Any conclusion which may be drawn from records of Meteorological and hydrographical data, at present in existence, must of necessity be *incomplete and fallacious (!)* It is of high importance, to furnish accurate geodetic data to determine the figure of our globe (!) A gravity survey would be of the highest importance. The study of the phenomena of ice, the origin and nature of icebergs . . . without which it will be difficult to arrive at definite results respecting the various epochs of the earth's existence. Connected therewith is the nature of ice-caps, which *probably cover the region surrounding the South Pole (!)* The question of the causes of the variability of geographical latitude (the undulations of the earth's axis), will probably be greatly elucidated. He hoped that the grand example set fifty years ago on the field of South Polar Exploration, might be renewed in our days (!) "

Sir Joseph Hooker, who was introduced by the Chairman, as the only survivor of Sir James Ross' Expedition, said :—

"He believed he was right in saying that the key to the future knowledge of terrestrial magnetism, lay very much in the ascertainment of the exact position of the *South Magnetic Pole*. We knew nothing of the meteorology of the whole of that enormous area, and could only at the best, make guesses, and assumptions (!) "

We conclude from the foregoing, that it is the modern scientists, and not the ancients, who know nothing of the shape of the Earth.

In reference to the great, unpenetrated, southern circumferential ice-barrier, and its unexplored beyond; these "learned men," impose upon the world, their weak hypotheses, and vain theories; their confessed ignorance, guesses and assumptions; and declare there is a magnetic spot or centre, which they term a 'South Pole' in order to uphold their whirling Globe theory. But the 'Geodetic data' for mysticism is passing away, and the unprejudiced thinking world now ask for witnessing facts, sound knowledge, exact science, and truth!

Clement, the first co-Pastor or co-Bishop of Rome in his first epistle to the Corinthian Eulesia (included in one of the ancient collections of the Canon of Scripture) writes :—

"The unfathomable and unsearchable floods of the deep, are kept by His command; and the conflux (hollow or depth) of the vast sea, being brought together by His order into its several collections, passes not the bounds that He has set it, but as he

appointed (commanded), so it does remain. For He said :—'Hitherto shalt thou come, and thy floods shall be broken within thee. The ocean, impassible to mankind, and the worlds that are beyond it, are governed by the same commands by their great Master." Chap. ix., 9—12. Archbishop Wake's translation.

Until Astronomers, Geographers, and so-called scientists, give us facts for fiction, truth for ignorance, and also discover "*The South Pole*," and its "Ice-Cap," all believers in the Deity's graciously revealed Word, must reject and resist the infidels who practically deny and make void the Holy Inspired Writings! Clement's epistle was read in the primitive Ecclesias, an evidence of its authority. Photius, the Patriarch of Constantinople, in the 9th century, and others, have objected to its genuineness, because Clement speaks of "*Worlds beyond the Seas!*" The Apostle-taught Clement is a far higher authority than the man-taught Photius! *Scripture and Reason*, condemn the learned lumber, of false philosophers, with their guesses, silly senile suppositions and gas-assumptions! These men insist contrary to natural laws, and also contrary to logic; that The Earth is a whirling Globe, going round with other motions, at a terrific rate, carrying on its surface moveable objects, enveloped in rare air! Simply upon theory and without a single proof!

Beyond the circumferential southern ice-bound oceans Clement declares that there are "Worlds!"

The Bible also emphatically declares :

"The pillars of the earth are Jehovah's. He hath set the world upon them."—I. Sam. ii., 8.

"Of old, Thou hast laid the foundations of the earth."—Ps. cii., 25.

"Ye enduring foundations of the earth."—Micah vi., 2.

"Thou hast established the earth and it abideth."—Ps. cxix., 20.

"The world also is established that it cannot be moved."—Ps. cvi., 10 and ciii., 1.

"Jehovah founded the earth on its bases, that it should not be moved for ever, and beyond!"—Ps. civ., 5.

"For He hath founded it upon the seas and established it upon the floods."—Ps. xxiv., 2.

What are, so-called, Christian Hierarchies, with their multitudes of Priests and Parsons doing, that they should allow these infidel Globites to dupe and mislead the people? Is it because they are mere hirelings!? Either the Bible lies! or its opponents! Which? How can there possibly be a "*South Pole*," and an "Ice-Cap," to the unknown *Circular Southings*?

FACT TONIC *versus* ASSUMPTION.

Dedicated to the Pate or his Pater,  
Seeking "Geodetic data."

If his name should be cute,  
Bible teaching may suit.

## 1

Grand tints, in Truth, arise.  
With this voluptuous strain,  
Illum'd by word's of pow'r,  
To shake wild theories in an hour.  
Great Truths, in songs, arise,  
With words of mighty pow'r,  
Such words with music strain,  
Bring men misled, and dup'd, to reason's vein!

## 2

Thoughtster of ninety-five,  
List to a minstrel's theme,  
Take of fact- tonic to thrive,  
Cherish no idle dream.  
Sun's distance is, "stated,"  
*i. e., Estimated*  
In millions dilated!  
Digressing!  
Diverging!  
Decreasing!  
Inflated!  
Which *differ as dated!*

## 3

One hopes soon to reach "S. Pole,"  
As Sir R. (a science pet),  
Now fifty years on-roll,  
(They hav'nt reached it yet!)  
Assumption stands naked  
But not the long-Pated,  
Although closely mated.  
Cogitating!  
Discussing!  
Discriminating!  
Debating!  
For "South Pole" they're waiting!  
(N.B. "Probably ice-plated!")

## 4

Alas! for a phantom goal,  
And a Globites blank despair,  
Alas! for a mythic "Pole."  
"Alas!" for it isn't there!  
His hope e'en relaxes,  
In vote for the taxes,  
To find the Earth's motion,  
Vivisection-like notion!  
Sink it, *Level* (as the) Ocean!

## 5

Hypothesis potion!  
South Polar commotion,  
With its "Ice-cap" precotion.  
Audacious presumption!  
'Gainst Bible and gumption!  
Assumption!  
Presumption!  
Assumption!

## "THE BEST PROOFS" EXPLODED!

"You have to take it as proved that the earth moves. Day and night are *the best proofs* that the earth does really spin. Without this spinning there could be no day and night, so that the regular succession of day and night is caused by this spinning. Hence the appearances connected with the rising and setting of the sun and stars, may be due, either to our earth being at rest and the sun and stars travelling round it, or the earth itself turning round, while the sun and stars are at rest." *Astronomy*. Sec. iv. By Professor J. Norman Lockyer. Edited by Professor Huxley.

## HOW THE EXPLOSION TOOK PLACE!

"Modern astronomical observations has at length *exploded* the idea of *the immovability* of the stars." "The stars have a *real* movement of their own." *The Heavens*, by Professor A. Guillemin. Edited by Professor J. Norman Lockyer.

"As soon as it was CONJECTURED that the stars were subject to the law of gravitation it was *inferred* that they were *not motionless*." *Science Siftings*. Vol. vi. No. 133, p. 39.

## CIRCUMNAVIGATION.

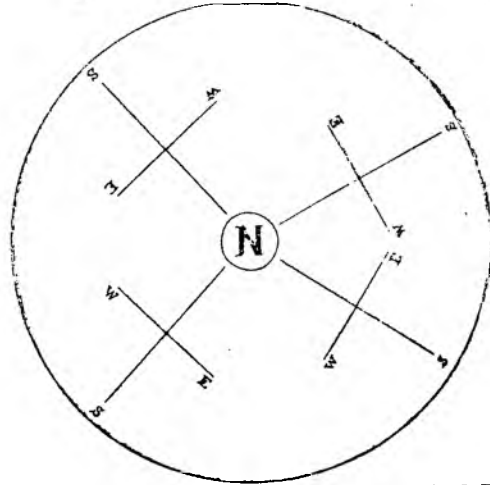
By THOMAS GEO. FERGUSON.

The question is often asked:—How can you account for ships sailing due East or West and returning to the place from which they started, or in other words, how is it possible to circumnavigate anything but a sphere?

The latter part of the question is absurd, although it is often asked by men of no mean intelligence in other matters.

The Isle of Wight has been circumnavigated some hundreds of times, but a man would be considered a likely candidate for a Lunatic Asylum who would say, therefore, the Isle of Wight is a Globe.

It is self-evident, then, that a body need not be a Sphere to be circumnavigated. Again, on the face of this so-called proof of the supposed globularity of the World there is deception, part of the truth having been omitted. It stands thus in many books:—"A Mariner sailing due East or West returns to the place of departure which could not be done on a flat surface;" but that he had attempted AND FAILED to circumnavigate his supposed globe by sailing due North or South has been entirely omitted. Now with regard to the former part of the question we will ask the reader to consider for a moment the following diagram.



N represents the North Centre (popularly called the "North Pole"), and the outer circle S S S S, the Southern Circumference (erroneously called the "South Pole.")

It will be seen that as the compass needle constantly points N and S the points, E and W will form a circle, and, following the circle to the right of the diagram would be travelling in an Easterly direction, and following the circle to the left, a Westerly course.

Again, it must be remembered that East and West are but relative positions and not fixed Points, even according to globular teaching, for instance: we should not be correct in saying that America was West unless it was stated, or understood, that it was West of Greenwich, a line which passes through Greenwich (on maps only of course) being taken in this case as a standard, and all places, the relative positions of which are on the right or left of this line; are spoken of as East or West of Greenwich.

If a map of the Earth as a plane be obtained it will readily be seen that the circumnavigation of the world is easier according to the PLANE TRUTH than it is according to the GLOBULAR THEORY.

Why this supposed proof of the supposed Globular shape of the World should be inserted in Geography Books is hard to understand, unless it is that the Globular theory is so wanting in truth that it is glad to catch at even a shadow, and even this will be found to be against it, if examined by the light of common sense and practical fact.

## SCIENCE'S QUARREL WITH THE BIBLE.

Extracts from Lectures By WALTER ROWTON, ESQ.

To say nothing of the visible angels which the corroborating Book of Genesis describes as constant messengers between heaven and earth, we learn from the earlier book before us, that God in those times had a method of communication with men which, after He began writing to them, became to a great extent disused. Elihu, in the most literal way, describes this. He says: In a dream, in a vision of the night, when deep sleep falleth upon men, in slumberings upon the bed; then He openeth the ears of men and sealeth their instruction" Job xxxiii. 15, 16). The statement is, God at that time instructed men; and some of the evidences to men that He did so were the supernatural character of their dreams and visions.

In the present day, the sham supernatural has brought the true into disrepute. Subtle reasoners, who don't believe in religious people because there are hypocrites, nor in honest tradesmen because some are rogues—these *won't* believe in the supernatural because of its deceptions. But with due respect for their view, I am bound to insist that base imitations could not be, but for genuine originals; and that only by falsifying the best attested histories in the world can the true supernatural be eliminated from the dreams of old.

The Jews—who if pedigree gives respectability, are the most respectable people in existence: the Jews—who gave us the Holy Scriptures, and whose strange history is a proof of their correctness: the Jews—who have carefully kept them from the first, and who, therefore, should best know whether they are true records or not: the Jews—who have every incentive for impugning histories which tell damagingly against themselves: the Jews assure us that the Old Scriptures are authentic; and as there are abundant reasons for taking their word, whilst there is no good reason for doubting it, such dreams as Elihu speaks of, as Joseph's and Jacob's and Pharaoh's, are worthy of all acceptance as historic facts: and the more so, because most of these dreams partook of the nature of short prophecies which had exact miraculous fulfilments.

Think of the witnesses who from Genesis to Revelation have attested the reality of miracles, supernatural dreams and visions: think of the mental and moral calibre of the whole of them: think—as they spoke chiefly of what they experienced, saw, or, as God's instruments, did—think, I say, if these are *not* the witnesses of truth, of the *deliberate* falsehoods these exemplary men condescended without possibility of collusion to utter. Think of Joseph, if he had only accidentally guessed right in interpreting the dreams of

Pharoah, his chief butler and chief baker, having the audacity to speak as God's commissioned messenger: think of Daniel having habitually committed the same enormity: think of the Bible dreamers always dreaming according to the interpretation of their dreams: think of the Bible interpreters being men greatly beloved of God, never reproved for their solutions of enigmas in His name, and never accidentally guessing wrong! And in the region of miracle, think of the walls of Jericho having only fallen flat by a strange coincidence "when the priests blew with the trumpets and the people shouted with a great shout:" think of Moses only pretending to plague Egypt: of Joshua having only pretended to converse with the Captain of the Lord's host: of Gideon having only juggled with that fleece of wool: of Daniel having somehow circumvented the lions, and then given the thing a miraculous colour that he might gain ascendancy over the Median king: think of Shadrach, Meshach, and Abednego making themselves fire-proof by a scientific process of which the particulars are not now recoverable: think of God having only been pretended by Solomon as the Giver of his wisdom and the Answerer of his prayer for it: and think of Christ having only pretended to feed "five thousand men, besides women and children" by the miraculous increase of "five loaves and two fishes:" having only pretended to raise the dead, to heal the sick, to cast out devils, and Himself to die and rise again!

Explain away the miraculous! we can make ourselves ridiculous by trying, but as to doing it—we may as well try to scale heaven! Subtract the miraculous and leave the historic—impossible! tear away the first and nearly the whole of the last comes with it. And why should we? Wherefore is not the miraculous part of the Bible as true history as any other part?

If we credit all we now hear, the splendid men of old, whose histories in brief the Bible gives, were so many weak-minded enthusiasts, bent on manufacturing archives out of mutual hallucinations: poor creatures the whole or them: and so insufferably oriental as to be quite unable, even in the commonest matters, either to express themselves comprehensibly, or to distinguish between fact and fancy. It is *we* who are the wise: they were but superstitious ignoramuses. Well, let our wise men produce a subtler and, in spite of its metaphors, clearer bit of argumentation than that between Job and his fellow-ignoramuses, *if they can*.

The world has its sages and its sages. Those whose works are obsolete are its wise sages: those who produced the only standard work in existence, the incomparable Bible, are its otherwise sages: that is to say, its foolish ones. Wanted an illustration of virtue—

where it is oftenest sought? Among the worthies of the Bible? Nine times out of ten among the greatly more esteemed worthies of heathendom! What perversity, for merely classical ends, to prefer the men, maxims, and morals of a dead heathendom before the inimitable exemplars of a living Bible! The infatuation of scholars for things heathenish—this seems the cause of the Bible's witness against heathen science revived being ignorantly under-valued.

Elihu, apparently knowing as perfectly well what he was talking about as the sanest man amongst us, declared supernatural dreams to have been one means of Divine communication with men; and he added, that what actual knowledge men possessed was imparted by the God who made and gave them life. It is "God my Maker," he says, "who teacheth us more than the beasts of the earth, and maketh us wiser than the fowls of heaven" (Job xxxv. 11). And Job, as if to illustrate this, comes out with a sample of the teaching received—"I know that my Redeemer liveth, and that He shall stand in the latter day upon the earth; and though after my skin worms destroy this body, yet in my flesh shall I see God" (Job xix. 25. 26). Where learnt he that? of men? And was it the initial fancy from which men, many of whom never saw one another, artfully conspired together, the living with the dead, to concoct that fairy tale—Christ and the Resurrection? Men are amazingly clever; but to attribute all this to them would make them out far more clever than hitherto they have shown themselves to be.

Supernatural dreams one of the means by which God imparted knowledge—visible angels seem to have been another; and in God's grand answer to Job "out of the whirlwind" we have a third.

Scientific gentlemen may sneer at the whirlwind communications of God with men; but the recorded fact that God spoke to Job is not to be displaced, except by proof that He did not; or shaken, except by substantiated inferences on the contrary. Disbelief by itself is not the mind-work of men, but the passion-work of fools: by itself, disbelief is not worth attention: yet only disbelief—by itself—has assailed this Bible statement.

That amongst the worshippers of God in Job's day there were very faulty notions—especially of God's providences, and man's ability to maintain his own righteousness before his Maker—is sufficiently evident: for Job himself had imbibed them. Nor was it strange it should be so; for although God himself was the teacher, His people were but scholars: education, in no case complete, was simply in progress.

Now Modern Science's position is, that God has proceeded upon the principle of adapting Himself to man's errors; and here is a test case proving He has done no such thing.

"Who is this," asks God, "who darkeneth counsel by words without knowledge?" (Job xxxviii. 2.) So far from endorsing Job's ignorance, God at great length exposes and reproves it; till Job humbly confesses he had uttered what he understood not, things too wonderful for him which he knew not. (Job xlii. 3.) God's action then, instead of being confirmatory of men's mistakes, seems at this most important juncture, when men were as yet without a Bible, a supernatural condescension to human ignorance to lift men out of it.

"Very true," say those we esteem, our Christian philosophers, "where it was, as here, a religious question, God did so act; but never where the ignorance was merely scientific."

A most reckless assertion, and completely falsified by this very record. How does God deal with Job's moral misapprehensions of his Maker? By directing attention to, and very minutely particularising, the visible works of His hand. He corrects his too-forward scholar by means of a series of object lessons; a principle later Scriptures describe Him always afterwards to have acted upon. *So that right views in respect to the universe are from first to last put forward by God as indispensable to right views of Himself. So far from these having nothing to do with our faith, God expressly establishes them at the very outset as the securest rock for faith to stand on.* And obviously they are; for whenever men depart from God's principle, they invariably end by departing from Him. *Themselves inventing a universe, as the Bible's God will not suit with it, their only alternative is to further invent a substitute that will. Instead of its personal Creator, they fill His place with idle speculations as to a not impossible First Cause.*

(Their "impossible First Cause" is the Sun! "The centre of the movements of all the celestial bodies of the system . . . is to us THE SOURCE of light, heat, and LIFE."—*The Heavens.*)

Modern Astronomical Teaching is here shown to be a specious form of MATERIATISM! ED. E.R.)

Not alone does God claim in the Book of Job to be the sole Creator of all visible things; but He propounds doctrines with respect to several which should make our Christian philosophers a little more doubtful than they are wont to be of the correctness of their opposing conclusions. Amongst the statements God Himself is credited with, are the following: "I laid the foundations of the earth;" the earth's foundations are "fastened;" and the earth, like other buildings, has "a corner stone." (Job xxxviii. 4-6.)

"Oh, but that is all allegorical, and of a piece with the whole book, which is nothing but a beautiful allegory!"

That, or a modification of it, is I know the modern suggestion; but it doesn't go far enough. God, Ezekiel, James, and Paul—these should be allegorical too!

Ezekiel declares, concerning the land of Israel, "Though these three men"—not these three myths—but, "Though these three men, Noah, Daniel, and Job were in it, they should deliver but their own souls by their righteousness, saith the Lord God." (Ezek. xiv. 14, 20.)

The apostle James would have done small service by instancing the "suffering affliction" of an imaginary individual: naming therefore the patience of Job he spoke of one historically and indisputably real.

The apostle Paul too, confirms the authority of the Book of Job, by quoting from it as a part of sacred Scripture, prefacing his extract with the usual, "It is written." (Job v. 13; I. Cor. iii. 19.)

To pronounce Job and the Book of Job metaphorical is, therefore, to fly in the face of authenticated history.

Again, there is a further reason for knowing that the statements read from the Book of Job are not metaphorical. Those precise statements are elsewhere repeated in terms as literal as any the Bible contains; and not merely once or twice, but many, many times: for instance; "Who art thou," asks God of His chosen nation, by His prophet Isaiah: "Who art thou that forgettest the Lord thy Maker, that hath stretched forth the heavens, and laid the foundations of the earth?" (Isaiah li. 12, 13.)

So you see that the earth's foundations, twenty-two times officially mentioned by God and His prophets, are not given as eastern fancy, but as literal sober, undeniable fact.

We are told that the amount of Eastern imagery in the Bible altogether beyond easy comprehension is perfectly incalculable; and so it is: the amount is so exceedingly small! Eastern imagery! why what is the earth, according to modern science? A monstrous balloon without a car, rushing through space and twirling as it goes. How appropriate then the Bible's Eastern imagery! for it to talk by God's order of the fastened foundations and corner-stone of such an express asteroid as this, is Eastern imagery with a vengeance—Eastern imagery so totally misapprehending the thing imaged as actually to receive upon its speculum a travelling sphere, and to reflect a fixed plane!

"But God acted thus to accommodate His words to man's ignorance."

If He did, that so-called ignorance was not by the men in question held to have been of their own origination. What we so



glibly style ignorance, they held knowledge: and the Author and Giver of it, they were certain was God. How modern Science has come to know better, I cannot say. If you gave me a piece of information, and I, supervised by you, wrote it down, and from whom I had received it—ages afterwards for some upstart to call my memorandum in question, for no other reason than that he didn't believe in the transaction beyond my fancying it happened; would not that be an impertinence? and for everybody to receive the modern upstart's statement, ignoring you, and libelling your information as my own ignorant guesswork, in defiance of the carefully-kept written document—would not that be an act of folly? Well, that exactly is the state of affairs between Job, God, Modern Science, and the world.

With what reason do our Professors object to the supernatural in Job's day, when even now things are done amongst us supernatural enough to baffle all attempts at explaining them? Do I then believe in modern Spiritualism? I believe in modern spiritism! the Bible announces it as to come, and here accordingly it is; taking, as a matter of course, the world by surprise, but not students of the Bible, who were looking for it. Yet, what is modern spiritism? A mere parody of that in Job's day! that was of God; this is of the Devil. "Why of the Devil in the one case more than the other?" Because modern spiritism proposes to govern by laws not God's, and to abolish His Bible. I. Tim. iv. 1; I. Thess. ii. 3; Dan. viii. 23, 24; Rev. xiii. 11-14; Rev. xvi. 13, 14.) See also *Spiritualism Unveiled*, by Miles Grant. Kellaway.

I fear our philosophers will think the remark rather flippant, but modern Science irresistibly reminds me of those over-estimated children—"too clever to live."

Listen to our philosophers, and no doubt "they are the people, and wisdom shall die with them." All our indebtedness is stated to be to Science, whose high priests by turns these gentlemen are. What that we pride ourselves upon has not she either originated or perfected? As for the fortuitous concourse of atoms, the gradual cohesion and subsidence of these into the fixed centres and revolving systems of the universe, the outcome of life from matter—there was no cleverness in these, and with these of course nobody had to do; but there *was* cleverness in arguing from atoms up to worlds, from worlds up to systems, from systems up to laws, from laws up to life, and from life up to nothing; and all *that* cleverness is her very own. From the invention of her own gas, to the analysing and methodising of all visible sky-glories—everything she assures us is attributable to her.

But who is she? who is this model of modesty?

The godly world—Solomon over again—is now very old: and having for many a day been without a single supernatural communication from God, he in the decline of life has done what men thus left to themselves have always done, he has taken up with a strange woman, who, alas, has "turned away his heart" (I. Kings ii. 1-8).

Whence comes she? is she of Christian origin? All her instincts anti-christian and heathenish, it would seem not. At all events she is his wilful darling—the more a genius the more extravagantly she conducts herself.

When the godly world was a young man, in vigorous possession of his brilliant faculties, thousands of years before modern Science beguiled him into idolatry of her and her gods—his invariable habit, from lusty manhood to past middle age, was, to put visible causes in the second, and God in the first place; for then he had, as he has witnessed, such direct intercourse with God that to contradict his own experience was impossible—it never once occurred to him. He held then, that from God came all the knowledge and all the skill he now—with strange forgetfulness of facts and dates—attributes to the outlandish charmer of his green old age. He held that with God originated the Astronomy he has since allowed his spoilt favourite to boast about as hers: that it was God who called the light Day, the darkness Night, the firmament Heaven, the dry land Earth, the waters Seas: that it was God who divided time into seasons, days, and years; that it was God who created and numbered the stars; that it was God, and not the heathen sages, who called them all by their names (Psalm cxlvii. 4; Isa. xl. 26), as Arcturus, Pleiades, Orion, and Mazzaroth (Job xxxviii. 31, 32); that it was God who taught so much of "the ordinances of heaven" as men correctly knew (Job xxxviii. 33). He held that with men did not originate everything art has superadded to nature; that with men did not originate the idea even of using the skins of animals for clothing. He held that men did not from floating boughs of trees gain the idea of crossing the water in ships; he held that the ship was not man's development of man's conception, but that God was the sole designer and Master-builder of the first ship constructed. He held that Moses, though learned in all the wisdom of the idolatrous Egyptians (Acts vii. 22), was not equal to planning the superb Tabernacle, nor to instructing the workmen how to fashion its coverings, utensils, and ornaments; he held that God Himself was the alone architect and Chief constructor, precisely as it is written. The artistic world may claim that the skilled knowledge herein; which the Book of Exodus attributes wholly to God, was borrowed

from the already rich stores of scientific men; and the godly world may stand idly by, seeing, hearing, and saying nothing; but time was when the godly world knew that had not GOD "filled Bezaleel" (Exod. xxxi. 2-4) "with His spirit, in wisdom, understanding, and knowledge, and in all manner of workmanship to devise clever works, and put in his heart to teach and to know how to work for the service of the sanctuary" (Exod. xxxvi. 1), the Tabernacle to all time would have remained an impossibility. And so long afterwards of Solomon's Temple, of which the exactest pattern is stated to have been given by the Spirit of God (I. Chron. xxviii. 12). "All this," said David, "the Lord made me understand, in writing, by His hand upon me, even all the works of this pattern." (I Chron. xxviii. 19.)

Under Divine guidance, the godly world at first and for ages following kept, so to speak, its Diary—our Bible! and therein we read, obviously not his romantic fancies, but his plain, every-day experiences, which were that with GOD originated everything of worth that was invented. But to-day, Science, theology, current literature, anything referred to rather than that: what is the consequence? the human medium through which the invention comes—glory be to him! he is the inventor; give to him the merit of the invention!

To those who would retort upon me that in all this I am rather assuming the being of God than proving it, I reply, Sirs, you mistake. Modern Science claims that men should glorify *her*; whereas it has been elicited from a host of creditable witnesses that the glory she covets is an inheritance already in possession. I have shown that up till recently God has received that homage now demanded by Science; and surveying the epochs between Solomon and Job, I have also shown that He has continuously received it from the earliest times. To-day, asked by modern Science to transfer my allegiance, I say, Readily, if her claim be just; but where is the justice of turning the present Occupant out of the estate He from time immemorial has enjoyed, until his title has been proved bad? Christians have not to prove the being of their God; it is modern Science who has, if she can, to get rid of Him. Where she aspires to be, He is; and as there is not room for two, Science must remain outside, unless she can dispossess the present Occupier.

I put in the Book of Job as unanswerable evidence in this case. Seeing that every attempt to invalidate this document has failed, I not alone *ask* that it be received as true, but I exercise my right of *demanding* that.

Legally entitled as the Bible is to all the advantages accruing from

the reception of the Book of Job as a true record of facts—let me sum up, so far, the evidence against Science and for Scripture.

The Book of Job convicts man of having originally attributed his knowledge of God, himself, and the universe, to the Divine Being; of having stated with certainty how that knowledge was cummunicated; and of having given such specimens of the knowledge received as, from their contrariety to human conclusions and preferences, are self-proved not to have been the results of men's cogitations, experiments, or observations. For instance: Man inclines to the belief that he is not a creation, but a development; the Book of Job declares that God "made" man. Man prefers to consider that his first notions of the universe were his own, and mistaken ones; the Book of Job avers that God was man's Instructor, and that His instruction was therefore true. Man definitely decides that the earth is an unsupported globe; the Book of Job as definitely represents it as laid upon the waters (Job xxvi. 7; see Dr. Adam Clarke), and as built upon foundations. Man cannot say there is not a First Cause, neither can he that there is: the Book of Job expressly states a personal Creator, and by its own clear evidence, preserved to us by the most ancient and honourable of the world's peoples, indisputably proves, through men He educated, and through one man who conversed with Him, that personal Creator's existence. Though man now turns round upon himself, and denies the witness he formerly gave, all this does the Book of Job establish by itself, without the tremendous testimony in corroboration of the after Scriptures.

## NAVIGATION PROVES THE WORLD A PLANE I

By "YACHTSMAN."

When at school, I was taught that the most conclusive proof that the Earth is a Globe, was found in the fact that the upper masts and sails of ships at sea are seen first, and as the vessels approach the observer, the lower masts and sails become visible, and finally the hull.

I am in possession of one of the most powerful glasses ever invented, or made by man. But to go into details. The iron barque, "La Querida," of Liverpool, left Capetown for Australia some time ago. I watched her from an elevation of 200 feet. She was in ballast, and thus presented a hull high out of water. As she sailed away, the entire vessel, masts, sails and hull *gradually* became less, until the hull was scarcely visible. I applied the "Emperor"

binocular glass to my eyes, and could see the hull as plain as the sails and masts. The ship went on until I could no longer see the hull, and only the masts and sails indistinctly. Again I applied the glass, and again saw the hull, masts and sails *all* very small, *but all distinctly visible*, although about 10 miles distant. Hence, I came to the conclusion that either my binocular glass has the power of piercing a segment of water miles in thickness, or that the earth is a plane and therefore not a globe.

On a fine afternoon I took up my usual position (200 feet above sea level) to watch the schooner "Lilla," of Capetown, sail away about due North for Saldanha Bay. As she left the land behind she appeared to climb the water in front of her until she came up to the line of vision of the horizon and my eye, and then *gradually disappeared* without making the least attempt to get *below* the horizon. When I could no longer see her hull, which was painted black, I applied my glass to my eyes, and the whole vessel was restored to sight. This continued until she appeared as a black spot on the water and the glass failed to distinguish between hull and sails. At vanishing point, she was still in the same line of sight that she appeared to ascend to when first leaving the harbour.

At my usual position again one very fine and clear morning, I saw a black spot far away on the horizon. As it drew nearer I could indistinctly see a funnel and two masts, but nothing whatever of the ship's body. Now, thought I, here's a fine chance to test the "Emperor" and the scientists globe teaching at one and the same time, and suiting the action to the thought, I applied the glass, when lo! and behold! What did I see? I saw a funnel, two masts, and the body of the steamer, and also the white wave being dashed from her bow by her speed through the water!!!

Now if any Observatory man can be found to attempt to prove the Earth a Globe, I am ready to meet him.

#### CONTENTS OF OUR LETTER BOX.

SOUTH SHIELDS. Dear Sir,—“Speak unto the children of ‘Parallax’ that they go forward.”

I held three meetings in the Market Place on Sunday. 11.45 a.m., The Bible and Physiology. 3.20 p.m., The Bible and Geology. 7.30, The Bible and Astronomy. The Truth *must* be spread. May the Lord in His rich grace and mercy save the Puzzled Clerics. We had good audiences. There were leading atheists, school teachers, and also the

Navigation School Examiner, but there was not one dissentient voice, I upheld the Word of God as the medium of all truth. I challenged them for two weeks to come and bring anyone to rebut my charges against Theoretical Astronomy and Geology. I have got scores of converts to the Plane Earth facts. Send me some more pamphlets, we intend to bury the Globe in South Shields this winter. Yours, &c.,

HARRY DE JOANNIS.

TUFNELL PARK, N. Dear Sir,—I like the "Earth Review" very much, and I purpose sending a copy to my friends and acquaintances in different parts of the country, and in this, or in any other way as opportunity occurs, shall endeavour to make the Journal better known. How would it do in the next issue, to invite subscribers to leave a copy at Public Libraries occasionally? I hope you will soon see your way to a monthly issue.

Yours faithfully,

J. B.

[We trust friends will follow this Gentleman's example, and also carry out his excellent suggestion. Ed.]

Dear Sir,—Have you seen a new book (March 1894) entitled, "A Winter Jaunt to Norway." The Authoress, who was an intimate friend of Dr. Nansen's, says, that from his windows at Lysaker, they "looked right away over the 70 mile stretch of Christiana Fjord—Now solidly frozen—to the open sea beyond." Page 195. It must have been Nansen, who

was showing them over his house at the time, who told Mrs. Tweedie and her friends the distance she says they saw. The book is very interesting and well worth reading. Page 108, she describes a "glorious winter night" scene that they saw. "On our right the Heavens were illuminated by the most perfect sunset one could desire, a sunset that spread over the whole sky, and changed continually from palest yellow to deepest shades of carmine. On our left, actually at the same time, the Heavens made a deep, dark blue frame to an almost full moon." "The effect was extraordinary." "We beheld our own shadows from the moon on the ice-covered lake, and at the same moment we could actually see a sunset in all its fiery glory by merely turning our heads. The sky was like a rainbow, and in this glorious setting the moon and the sun shone forth together." The distance they saw down the Christiana Fjord does not support the orthodox astronomical theories of the day.

M. F.

#### THE ZETETIG'S OPEN COLUMN.

ANSWER (5). The so-called shadow is not always round, it was once noticed to be "a dark isosceles triangular shape;" but a straight object would give a *curved* shadow upon a sphere as you may prove by holding a straight-edge before an apple by gas light, but it has never been shewn that the Earth could possibly cast a shadow on the Moon. If the Earth cut off the Sun's light from the Moon, the Moon ought to go quite dark during the eclipse, but it does not, its light *shines through* the supposed shadow. Parallax thought—that—a semi-opaque but dark Moon came between us and the luminous Moon and so caused the lunar eclipse. Astronomers admit that there are dark bodies in the Sky.

It may be the Moon is "eclipsed" by getting into a mass of "thick darkness" which revolves around and over

the Earth in an opposite direction to the Sun, this thick dry foggy atmosphere obscures the Moon's rays but does not *obliterate* them. It cannot be admitted that the "Earth's Shadow" causes an eclipse, because Sun and Moon have both been seen *above the horizon* during an Eclipse of the Moon, and we know from other sources that these Bodies revolve over a Plane Earth. B. BLOUNT.

The Creator of the Moon declared—and thereby confirmed as absolute truth, the inspired account as given by the Holy Spirit in Gen. i., 16—that the Moon's light is an inherent light, hence Moonlight (Matt. xxiv., 29). This is confirmed by every practical investigation. Is there a scientist living who would try to "eclipse" the light of a policeman's bulls-eye lantern by putting a globe between it and another? besides;

and this should never be lost sight of, the so-called "shadow" *always* commences to eclipse the Moon from the East side, therefore *overtaking*, and passing on in the same direction as the Moon is travelling! But, if the so-called shadow proof—alas! its only shadow!—of globularity was an absolute proof; and not a mere "hypothesis to explain phenomenon," then the shadow would *meet the Moon* and not *overtake it* as it does. Again, the speed of the earth in its orbit compared with the speed of the Moon in its orbit, utterly, from a globular stand point, proves the falseness of the so-called proof and for ever closes the mouths of all opponents! They claim that the earth is travelling in an orbit round the sun at the "rate of 68,305 miles an hour," while the Moon is travelling in an orbit round the earth, and consequently must of necessity move faster than the earth or about 180,000 miles an hour. It is therefore utterly impossible that the shadow travelling at the rate of 68,305 miles an hour can overtake the moon travelling at 180,000 miles an hour. What an infinite difference is shewn to exist between absolute fact, and conjectural and illogical theory.

A HOTTENTOT.

It is not necessary for our enquiring friend to associate a "shadow" with a lunar eclipse, water being horizontal and the earth in consequence a plane, a shadow from the earth cannot possibly operate.

It is admitted that invisible bodies exist in the firmament, such bodies become apparent when in a line between an observer and a luminous body like the moon, though invisible to the human eye when not so situated. Such bodies have been photographed with the aid of a telescope and made apparent to vision, showing that the apparatus, etc., of the photographer is more sensitive than the retina of the eye—the intervention of such a body which Parallax says "is the direct cause of a lunar eclipse," explains the "rotundity" observed in connection therewith.

J. ATKINSON.

ANSWER (6). Day and night are produced by the movement of the Sun over an outstretched earth, bringing light in succession to all places so traversed, being a small body compared with the size of earth, it is only able to illuminate one portion at one time, as it advances on its unceasing course it is gradually preceded by A.M. or morning, P.M. or evening following in its wake.

J. ATKINSON.

(6). Day and Night are caused by the revolution of the Sun over and around the Earth, the Sun is neither high enough nor large enough to shine over all the Earth, but only over about half of it at one time. B. BLOUNT.

QUESTIONS (7). The following statement is taken from the *Pupil Teacher and Scholarship Student*, Jan. 24th, 1895.—"In the making of canals it is necessary, in order to have uniformity of depth, to allow 8 inches in each mile." Is this true? C. R. E.

(8). Where is the limit or boundary of the Earth's atmosphere, and how, if there is such a limit or boundary, is it accounted for? (9). Seeing that objects at different heights are visible at a greater or less distance; for example, Mount Egmont, 8,838 feet high above sea level, is discernable from the deck of vessels at Sea, a distance of 160 miles; the light from the Eiffel Tower can be seen 40 miles away? (I have *heard* that this light has been seen from a distance of 90 miles. I am in possession of evidence from the globular side that it can be seen from a distance of 75 miles! Ed.). How is it that the sun, 3,000 or 4,000 miles away on the plane theory, cannot be seen over all the earth at the same time; likewise the moon and stars? (10). If the earth be a plane, Why is it not possible to see through telescopes across the German or Atlantic Ocean, when a ship, as you say, having sunk below the horizon can be brought within vision again by the above means? (11). If the stars are comparatively near to the earth, Why

does so long a period elapse before we can catch sight of the comets which return periodically? (12). If the earth be a plane, how are the different phases of the moon accounted for—for example—the full moon: the sun being higher than the moon, it, to my mind, would be impossible for us to see the moon at full, Would it not? J. E. GREEN.

(13). It is reported of the storm that passed over the Midlands (March 24th), that it travelled from West to East at the rate of 90 miles per hour. How is it that the hurricane overtook the globe-earth, which they tell us "revolves upon its axis from W. to E. at the rate of 1,000 miles a minute"? Is this not a

hurricane proof that the earth has no "axial rotation," which they say "is the cause of day and night"?

D. Y.

(14). What are the evidences we find from careful observation that the teaching of Popular Geography and Astronomy are not true but misleading and unscriptural? (15). In the *English Mechanic*, April 12th, 1895, I read the following: "The size of the shadow according to photography taken of the eclipsed moon, is greater than the diameter and distance of the earth given in text books will account for." How is this?

THOMAS WHITTLE.

Unanswered Questions, 2, 3.

## ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,

c/o Mr. J. WILLIAMS,

32, Bankside, LONDON, S.E.

C. HARPUR.—Thanks for your missive. You are always amusing. Can you tell us in what direction did Mr. Borchgrevinck see the Southern Midnight Sun? What was its position and height above the horizon? What Orbit did it describe; circular, oblong, square, hexagon, the figure 8, or what? I suppose you are aware of the fact that the phenomenon is a "striking argument" against Globularism? We are "forced to silence" by the lack of practical evidence which is essential to prove the subject out in connexion with a plane earth. When we are in possession of that evidence, we shall be only too pleased to insert it in this Journal for your esteemed consideration. You at least ought to know that no heavenly phenomena can in any way affect the INVULNERABLE FACT, that, "the surface of all water at rest is an horizontal plane."

MR. BROOKMAN.—We have forwarded Canon Mills some literature as you requested and trust it may have the desired effect. "The altered Translation," an extract from which appeared on the cover of "E.R.," is the title of a publication by B. W. Newton. It can be had from the Hon. Sec., 9d., post free.

A. MC INNES.—Thanks for your MS., too late for this issue.

J. ATKINSON AND OTHERS.—Accept our hearty thanks for *At Home and Abroad*. We can well understand and fully endorse its language respecting the great loss of one of the honorary associates of the Y. W. C. I., Mrs. Irving, D.V.—We shall reproduce her verses "Give me to Drink," in our next issue; also in the near future we may publish some of her private letters to ourselves. We trust that *all* Zetetics will follow her noble example for the advancement of one of the most important truths extant, and join the U. Z. Society.

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec. post free, to any address in the postal union for 10d. per year, in advance.

All monies for the Society must be paid direct to the local Vice-Secretaries, or direct to the Hon. Secretary and Treasurer, Jno. Williams. Post Office Orders to be made payable at Sumner Street, S. E.

Owing to pressure in business matters we have been unable to notice the criticisms on "Bible Astronomy" in *Zion's Watch Tower*, or Mr. Hope's statements, but we hope to attend to them in our next issue.

"The Earth not a Globe," by "Parallax," uncut, 15/- Address to Hon. Sec.

Zetetic's desirous of obtaining books "out of print," (or in print either) should communicate with the Hon. Sec., who is identified with a system of enquiry for obtaining the same.

We trust that friends will forward us all the information they possibly can upon the subjects suited to this Journal.

### In Memoriam.

It is with deep regret that we announce the decease of our esteemed and invaluable friend MRS. BESSIE IRVING, of Belfast, who fell asleep in Jesus, July 15th, 1895. Aged 50 Years.

She was a Zetetic of no mean calibre, and her beautiful model of the World, which can be seen at the Y.W.C.I., Belfast, is proof positive of her deep philosophical intelligence.

She was accomplished in Botany and other Sciences and learned in the Greek and Latin tongues with an acquaintance of French and German.

Her Scriptural Knowledge was very great.

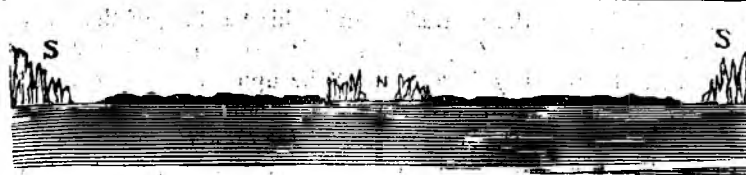
She was the First Hon. Sec. to the Prison Gate Mission in Belfast, and done a great deal to the Glory of God in that good cause.

Thank God we know that our loss is her gain, for to be:—

"Absent from the body" is to be "Present with the Lord."

## THE EARTH—NOT A GLOBE—REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

NO. 6 (NEW SERIES). JANUARY, 1896.

PRICE 2D.

### "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

NO. II.

Dedicated to the Editor of REYNOLDS'S NEWSPAPER.

*The Earth—not a Globe—Review*, in order to convince us that the world is flat quotes some comments we made in these columns on the subject. The editor begins a series of articles, in the first of which are some interesting extracts with the view of proving that there is no such thing as the law of gravitation. So far he has not reached the point any further than by showing that gravitation is merely a probability. Of course it is merely an assumption, which explains the largest number of results, and science can go no further.—*Reynolds's Newspaper*, October 6th, 1895.

We are pleased to see that our friend—the Editor of *Reynolds's Newspaper*—has taken a step backward, viz., from "the fact of gravitation," to the definite and undeniable groundwork of that theory, viz., "OF COURSE IT IS MERELY AN ASSUMPTION." Of course it is Sir, and *nothing else!* And being "merely an assumption," it cannot "explain the largest number of results," in fact it cannot explain any at all, for that which does not exist in fact, cannot explain results. Even the opponents of Christianity declare, "Agreement is only possible when the conclusions arrived at are the result of experience and observation, about whose VERIFICATION there is no doubt."—*Freethinker*, Oct. 16th, 1892. p. 659.

But the Editor of *Reynolds's Newspaper* speaks again:—  
Mr. H. Sims writes to me a letter on the Flat or Round Globe controversy, in which he contends, and quite correctly, that if the Bible can be believed the

J. ATKINSON AND OTHERS.—Accept our hearty thanks for *At Home and Abroad*. We can well understand and fully endorse its language respecting the great loss of one of the honorary associates of the Y. W. C. I., Mrs. Irving, D.V.—We shall reproduce her verses "Give me to Drink," in our next issue; also in the near future we may publish some of her private letters to ourselves. We trust that *all* Zetetics will follow her noble example for the advancement of one of the most important truths extant, and join the U. Z. Society.

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec. post free, to any address in the postal union for 10d. per year, in advance.

All monies for the Society must be paid direct to the local Vice-Secretaries, or direct to the Hon. Secretary and Treasurer, Jno. Williams. Post Office Orders to be made payable at Sumner Street, S. E.

Owing to pressure in business matters we have been unable to notice the criticisms on "Bible Astronomy" in *Zion's Watch Tower*, or Mr. Hope's statements, but we hope to attend to them in our next issue.

"The Earth not a Globe," by "Parallax," uncut, 15/- Address to Hon. Sec.

Zetetic's desirous of obtaining books "out of print," (or in print either) should communicate with the Hon. Sec., who is identified with a system of enquiry for obtaining the same.

We trust that friends will forward us all the information they possibly can upon the subjects suited to this Journal.

### In Memoriam.

It is with deep regret that we announce the decease of our esteemed and invaluable friend MRS. BESSIE IRVING, of Belfast, who fell asleep in Jesus, July 15th, 1895. Aged 50 Years.

She was a Zetetic of no mean calibre, and her beautiful model of the World, which can be seen at the Y.W.C.I., Belfast, is proof positive of her deep philosophical intelligence.

She was accomplished in Botany and other Sciences and learned in the Greek and Latin tongues with an acquaintance of French and German.

Her Scriptural Knowledge was very great.

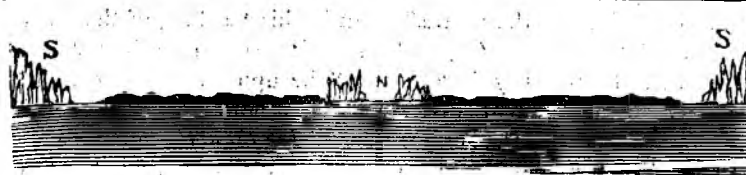
She was the First Hon. Sec. to the Prison Gate Mission in Belfast, and done a great deal to the Glory of God in that good cause.

Thank God we know that our loss is her gain, for to be:—

"Absent from the body" is to be "Present with the Lord."

## THE EARTH—NOT A GLOBE—REVIEW.

*When the majestic form of Truth stands before the bar of justice,  
that hideous monster, Error, hangs its head in silence.*



A Sectional View of the World as a Plane.

NO. 6 (NEW SERIES). JANUARY, 1896.

PRICE 2D.

### "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. II.

Dedicated to the Editor of REYNOLDS'S NEWSPAPER.

*The Earth—not a Globe—Review*, in order to convince us that the world is flat quotes some comments we made in these columns on the subject. The editor begins a series of articles, in the first of which are some interesting extracts with the view of proving that there is no such thing as the law of gravitation. So far he has not reached the point any further than by showing that gravitation is merely a probability. Of course it is merely an assumption, which explains the largest number of results, and science can go no further.—*Reynolds's Newspaper*, October 6th, 1895.

We are pleased to see that our friend—the Editor of *Reynolds's Newspaper*—has taken a step backward, viz., from "the fact of gravitation," to the definite and undeniable groundwork of that theory, viz., "OF COURSE IT IS MERELY AN ASSUMPTION." Of course it is Sir, and *nothing else!* And being "merely an assumption," it cannot "explain the largest number of results," in fact it cannot explain any at all, for that which does not exist in fact, cannot explain results. Even the opponents of Christianity declare, "Agreement is only possible when the conclusions arrived at are the result of experience and observation, about whose VERIFICATION there is no doubt."—*Freethinker*, Oct. 16th, 1892. p. 659.

But the Editor of *Reynolds's Newspaper* speaks again:—  
Mr. H. Sims writes to me a letter on the Flat or Round Globe controversy, in which he contends, and quite correctly, that if the Bible can be believed the



world is quite flat. Everyone now knows that the Old Testament does teach that the world is flat. Perhaps if Mr. Sims addresses, say, the Archbishop of Canterbury—in that dignitary's official, but not learned capacity—he will discover why no State-Church parson believes the Bible in this respect.—Oct. 19th, 1895.

Yes, the Bible does "teach that the world is flat" *approximately*; and consequently there is no need of "the law of gravitation" to "draw everything to the centre." But is this teaching of the Bible true—*absolutely true*? Yes, and the scientists themselves *tacitly* admit the fact when they declare that "the upper surface of a fluid at rest under the action of gravity alone is a horizontal plane, since otherwise, if a part of the surface were *higher than the rest*,"—don't you see it? This is a tacit acknowledgment that the world is NOT A GLOBE!! If the World were a Globe, then of necessity "a part of the surface" MUST be "*higher than the rest*," for as they themselves have owned, "*whichever way you go on a Globe you must go down*," therefore one part must be higher than the other, and that part is the observer's standpoint. But, be it remembered, that where there is a "*down*" there *must* also be an "*up*," therefore the above statement is a "*down*"—right proof that the World is not a Globe—but to continue—"those parts of the fluid which were under it would exert a greater pressure upon the surrounding parts than they received from them, so that motion would take place amongst the particles and continue until there were none at a higher level than the rest, that is, until THE UPPER SURFACE OF THE WHOLE MASS OF FLUID BECAME A HORIZONTAL PLANE." *The First Principles of Natural Philosophy* by Mr. W. T. Lynn, of the Royal Observatory, Greenwich, p. 51.

This testimony is absolutely true to Nature and experimental fact; therefore the assumptions of convexity and concavity are relegated to the lethe they came from by the savants of the Royal Observatory.

But let us continue our enquiry:—

IS THERE IN THE UNIVERSE ANY SUCH "FORCE" OR "LAW," AS THE "LAW OF GRAVITATION.?"

6th. "The history of science (so-called. ED.) shows that ALL the great laws of mind and matter have been *discovered*, NOT BY DEMONSTRATION but by IMAGINATION." SCIENCE SIFTINGS, Vol. i. No. 15. p. 235.

That this is absolutely true is proven by the undeniable and acknowledged fact that Kepler "discovered" his three "Laws of Planetary Motion" in that way. Listen to the testimony of your own schoolmen, ye, who believe in the "earth's sphericity," surely you will believe them won't you? even though you deny the evidence of your senses that they may be considered, "The wise guides, philosophers and friends, who do lay upon themselves the onerous

duty of deciding these momentous problems for us."—LORD SALISBURY. *Morning Leader*, June 23rd, 1894.

• Listen, I say, to Professor W. B. Carpenter, C.B., F.R.S., etc. 7th. It was not until twelve years after the publication of his first two laws, that Kepler was able to announce the discovery of the *third*. This, again, was the outcome of a long series of GUESSES, and what was remarkable as to the error of the idea which suggested the second law to his mind, was still more remarkable as to the third; for not only, in his search for the 'harmony' of which he felt assured, did he proceed on the erroneous notion of a whirling force emanating from the Sun, which decreases with increase of distance, but he took as his guide ANOTHER ASSUMPTION NO LESS ERRONEOUS, viz., that the masses of the Planets increase with their distances from the Sun. In order to make this last fit with the facts (?) he was driven to ASSUME a relation of their respective densities, which we now know to be UTTERLY UNTRUE; for, as he himself says, 'unless we ASSUME this proportion of the densities, the law of the periodic times will not answer. Thus, says his biographer, 'three out of the four suppositions made by Kepler to explain the beautiful law he had detected are now INDISPUTABLY KNOWN TO BE FALSE? what he considered to be the proof of it, being only A MODE OF FALSE REASONING by which 'any required result might be deduced from any given principles.'—*Modern Review*, Oct. 1880.

And these "three laws" are the basis of Newtonian "Universal Gravitation," O! most glorious origin!!

The most superficial scholar knows what is the received explanation of the movements of the Planets round the Sun, viz., that when the Planet is first hurled on its course from the hand of its Maker, the Maker of the Planets is the sun, its tendency is to go in a straight line; but this tendency is arrested by the attraction of gravitation, and the two forces acting in opposition to each other cause the orb which they control to move in a curve. It was supposed by Kepler that this curve did not form a perfect circle, but an ellipse, and that the Planet was accelerated in some parts of its orbit when it was nearest the Sun. The cause of this discrepancy was attributed by Newton to the antagonistic action of the centripetal and centrifugal forces: as the attraction of gravitation, or centripetal force, gradually overcomes the centrifugal, the Planet is drawn nearer the Sun, and its speed in its orbit accelerated.

But let us see what another eminent Professor of Astronomy has said about centrifugal force, and we shall find that the "laws," which Professor Guillemin in *The Heavens*, edited by Professor Lockyer, informs us that Newton "extended to all the bodies of our Solar system," are no more to do with Natural Phenomena, than the ravings of a madman.

8th. CENTRIFUGAL FORCE IS A FICTION; THERE IS REALLY NO SUCH THING AS CENTRIFUGAL FORCE." PROFESSOR AIRY, *Mathematical Tracts*. Note on p. 140, 4th ed.

No wonder that JULIUS SILVERSMITH, Esq., M.A., said:—

9th. "So far as mathematical astronomy is based upon mathematics alone, and draws ALL ITS CONCLUSIONS from ASSUMED data, such conclusions cannot be natural and true, but are simply artificial and delusive. Newton was pre-eminent in his ability to decipher objects and INVENT 'laws' that were *not in existence*, and his followers have relied upon their seeming accuracy, simply because they could be illustrated by lines and figures, by clockwork and machinery, by pictures and pasteboard. Such is *really* the case with his theories of attraction and gravitation."—Earth No. 5, p. 34.

10th. "In elementary Works on the motion of the Planets are given elaborate diagrams borrowed from Newton's PRINCIPIA, for the purpose of demonstrating the law of centripetal and centrifugal forces; and any student who masters these diagrams fancies that they conclusively prove the truth of the theory.

[We shall produce some of these diagrams to conclusively illustrate that the whole theory is absolutely false, and prove that it is so by a direct appeal to the known motions of the planets and comets].

Our student, however, acts under the same erroneous impression as that which governed the mind of Sir Isaac Newton, as in his time there did not exist sufficient scientific knowledge to expose *the fallacies of the data*. Newton asserted *theoretically* that which is *practically impossible*, viz., *firstly*, that there could be centrifugal force developed by one body revolving round another *when* the two bodies were *not* MECHANICALLY UNITED; and, *secondly*, that this centrifugal force was so exactly a counterpoise to gravitation, that an *increase of velocity* in the revolving body towards the gravitating direction was sufficient to prevent gravity (gravitation) becoming triumphant and *thus* drawing the revolving body *out of its orbit altogether!*

Centrifugal force can only be developed in a body revolving on its own centre or round another body to which *it is* MECHANICALLY ATTACHED . . . The problem with which Newton attempted to grapple was to discover the forces and laws which govern the movements of the heavenly bodies. He signally failed in solving the mystery. To get his rotatory movement he was obliged to resort to the clumsy *invention* of a centrifugal force, which under the circumstances stated is an impossibility. In spite of Newton's demonstration, it is quite certain that the FALLING of a stone to the earth is not a phenomenon similar to the motion of the Moon in its orbit: the phenomena bear not the slightest resemblance to each other, nor can they in any *true sense* be attributed to the *same cause* . . . The great 'discovery' of Newton, viz., 'universal gravitation,' thus appears destined to share the fate of the large majority of human *inventions*, and to take its place with other antiquated ideas in the museum of the extinct system of a progressive science (so-called).

The ridiculous Newtonian *idea* of the Sun being a fiery furnace; and the *notion* that the movement of the heavenly bodies is caused by universal gravitation modified by what is popularly known as centrifugal force, are part of the ignorance, almost monkish, of the age in which such teaching were accepted. The time has surely come when we ought to discard our cant respecting the wonderful reputation of Sir Isaac Newton, and be content to regard him simply as a mathematician and scientist, scarcely as a philosopher. His treatment of Flamstead and Leibnitz prove him to be morally a very sublunary mortal indeed; and I am inclined to think that if his little pet dog had destroyed a great deal more of his work, the animal would have done the world no disservice.

I should be sorry to violate Sydney Smith's injunction, and 'speak disrespectfully of the equator,' but I am compelled to speak very disrespectfully of gravitation, and of its principal expounder, Sir Isaac Newton. He is popularly, but erroneously, supposed to have been the discoverer of gravitation, but the fact is he was only its systematizer. His hypotheses or rather paradoxes are no longer alive; they may now be embalmed and buried in the consecrated ground of an Encyclopædia. The attempt to perpetuate them can only be a stumbling-block in the path of *true science*. I have already shewn—or striven to show—that his system teems with fallacies; and must be exploded. It is no sufficient reply to say that mathematicians of the highest eminence have accepted it and demonstrated its verity. Mathematicians can demonstrate anything IF YOU GRANT THEM THE DATA WHICH THEY REQUIRE, and from which they must start: in this case the question is, whether the Newtonian data are correct. Mathematicians enjoy no immunity from error any more than any other class of reasoners. Professor Thorold Rogers remarked of mathematicians, that 'they were generally *dunces*;' and of one very distinguished mathematician it was said that 'he had a very narrow escape of being an idiot.' But the fact is, mathematics has nothing to do with proving or disproving the Newtonian theories, which are merely AN ERRONEOUS METHOD OF EXPOUNDING CERTAIN PHENOMENA OF NATURE."

*The New Principia*, by NEWTON CROSSLAND.

(To be continued).

## GLOBE SCALING.

By W. Carpenter.

To prove that a "model" globe is to a *double scale*, measure from London to Philadelphia on the first globe you see; the distance is 3,000 miles, the *space* may be 2, 3 or more *inches*, say 3 inches (perhaps a 1 foot globe), then the scale is 1,000 miles to the inch; let that answer for the "Northern Hemisphere"; now turn to the Southern, measure again from C. G. Hope to C. Horn; only a fraction more *space*, but how great the *distance!* Captains tell me it is 9,500 miles, this is the *least* distance; I have heard as high as 12,000 miles; call it 9,000; then the scale is 3,000 miles to the inch (the journey in question being a *certain* number of *degrees* out of the 360°, it *must* be *allowed* that the balance of the measure round must be the complement, and to the same scale), *ergo*. Northern Hemisphere 1,000 miles to the inch, Southern, 3,000 miles to the inch! Everything in the way as a model or a plan, made to a double scale, is a folly and a fraud. Try the plan of a house and see for yourselves.

## A LIGHT ON THE SUN.

*Letters to the Editor of the "Evening News," Portsmouth.*

Sir,—We have just discerned a most gigantic and important error in modern astronomy, concerning the sun's estimated diameter and its path along the ecliptic. Mr. R. A. Proctor, in his picture of the seasons, gives a graphic plate of the sun's path through the twelve signs of the Zodiac for every month and day in the year. There are thirty degrees allowed for each sign; a degree is sixty geographical miles. The ecliptic runs through the centre of each sign, for which there is allowed sixteen degrees, with seven degrees each side clear. Now, 60 by 16 equals 960 geographical miles. The sun is estimated at 882,000 miles in diameter; then the query is: How can a body like the sun be contained in a line or groove that is only 960 miles wide, when that ball or body is 882,000 miles in diameter?

In all cases there is required half the diameter of the ball for width of groove. If a ball is six inches in diameter, the groove must be three inches in width, so that there would be required 7,250 degrees space for the sun to move through the ecliptic. Now, this disparagement alone, fully traced out, is sufficient to announce the overthrow of modern astronomy in its measurements and hypothesis. We challenge any astronomer to rectify the error, or reconcile the hypothesis. As all measurements are reckoned from the sun as a basis, the sun can only be about five thousand miles in diameter, or half the diameter of the earth. That would be found to be a far more correct estimate; and everything in astronomy should have been reckoned by thousands instead of millions; it would have been much easier for all students, and far more correct for all natural astronomy. The earth is no doubt ten thousand miles in diameter, as the Norwegian sailor stated at the late Geographical Congress that he found South Victoria a continent twice the size of Europe, and not a mere strip, as marked on the map. Certainly 16 degrees for the ecliptic would only allow the sun to be about 3,000 miles. We are willing to allow it is 5,000, but no more—all other bodies in proportion. Breadth can be measured much better than height,

Yours truly,

Portsmouth, 12th Sept., 1895.

EXAM.

Sir,—Your correspondent, "Exam." who tells us that he has just discerned a gigantic and important error in modern astronomy, appears to be labouring under the delusion that a degree is an invariable quantity, instead of being the 360th part of a circle,

whether great or small. What he appears to have got into his head is the measure of a degree of longitude at the equator. Now, the measure of a degree of an arc of a circle, whose radius is the mean distance of the sun from the earth, is 1,600,000 miles, about. Hence the width of the belt of the ecliptic is, in round numbers, 13,200,000 miles, instead of 960, as "Exam." has it.

It might interest some of your readers to know that a degree of a heliocentric circle passing through the star Vega (not a remote star), would be one billion five hundred thousand million miles approximately.

Yours respectfully,

L. C. P.

Sir,—Allow me to inform your correspondent "L. C. P." that "Exam." was quite aware of his definition of a degree of a circle, but the ecliptic happens to be a line drawn through the centre of the circular signs of the Zodiac. The late R. A. Proctor, in his Zodiacal maps of the seasons draws a straight line through each map. Another well-known astronomer says that "a degree is therefore only a relative and not an absolute quantity, except when applied to a great circle, such as the equator"—and such is the ecliptic—"in which case it is 60 geographical miles, or 69.1 geographical miles." Therefore it is the breadth of a line, belt or groove through which a concentrated body of light, heat, and attraction like the sun is constantly travelling, not the circular signs of the Zodiac. With regard to the distance of the star Vega, it reminds me of Bessel, who estimated the distance of the star 61 Cygni at 60 trillions of miles, but soon after came Struve's measurement, making it move nearly 40 trillion miles, so the second measurer cut off 20 trillions as though it was only so many dozens, without the least hesitation. Sir William Herschell was wise on that point; though he spent all his life in trying to measure star distances, he acknowledged it to be a failure. From analogy, reason and experience, we know that bodies for the supply of light and heat are always placed as near the surface to be enlightened as possible, not at an incalculable or immeasurable distance. What would be the use of placing the electric light for Portsmouth on Portsdown Hill? I question if the stars could ever be photographed if they were at such an immeasurable distance. The deductions of mathematics must be eventually displaced by the facts of nature, analogy and reason. The fittest *must* survive.

Yours truly,

Portsmouth, Sept. 17th, 1895.

EXAM.

Our friend, "Exam," before writing to the Portsmouth Paper, wrote to *Sir Robert Ball*, pointing out the important error and

asked for a solution or reconciliation of the same. This is the reply of the *Lowndean Professor of Astronomy and Geometry in the University of Cambridge*. "See the *Atlas of Astronomy* for your difficulty." R. Ball.

Evidently the Professor is more interested in the profit of his 15/- book than he is in vital questions affecting the teaching of that of which he is the representative and exponent.

Possibly he has a lively recollection of one, Professor Woodhouse, who, in or about the year 1840, occupied the same chair, and from it declared:—"When we consider that the advocates of the Earth's stationary and central position can account for and explain the celestial phenomena as accurately as we can, in addition to which they have the evidence of the senses, and Scripture and facts in their favour, *which we have not*, it is not without some show of reason that they maintain the superiority of their system. Whereas, we must be content, at present to *take for granted* the truth of the hypothesis of the Earth's motion, for one thing. We shall never, indeed, arrive at a time when we shall be able to pronounce it absolutely proved to be true. The nature of the subject excludes such a possibility."

"However perfect our theory may appear, in our estimation, and however simply and satisfactorily the Newtonian hypothesis may seem to us to account for all the celestial phenomena, yet we are here compelled to admit the astounding truth, that *if our premises be disputed and our facts challenged, the whole range of Astronomy does not contain the proof of its own accuracy!* Startling as this announcement may appear, it is nevertheless true; and astronomy would, indeed, be helpless were it not for the countenance given to it by the implied approval of those whose authority is considered a guarantee of its truth. Should this sole refuge fail us, all our arguments, all our observations, all our boasted accuracy would be useless, and the whole science of astronomy must fall to the ground."

It must be evident to all men who think for themselves, that the whole superstructure of modern theoretical astronomy is based, first of all, on the SUPPOSED stationary condition of a centrally placed sun, which *supposition* was derived from another *supposition*, viz., its *supposed* enormous bulk, this being deduced from a *supposed* parallax obtained by a pretended measurement of a purely conjectural base, from one side of its imaginary orbit to the other! Could professional device invent anything more glaringly fictitious? Alas! that men can teach such glaring absurdities can only be explained by the fact that there are in the world more gullible than wise people.

ED.

## FACT v. FICTION.

(1.) I said a thing can only be in one place at a time. G.M. answers that latitude is found in connection with the *apparent* direction of an object. True, but beside the mark. For I suppose the *apparent* direction has something to do with the real direction; if not we should be lost entirely.

(2.) I am accused of supposing the eye at S. I didn't. I supposed the Sun there. This is the second time G.M. has made this mistake, and the second time I have corrected him.

(3.) G.M. challenges me to give the observed altitudes of the Sun at equinox for lats 10°, 20°, 30°, 40°, etc., and to show that the lines of direction meet at the same point. Why! that is the very thing I did in my leaflet, only on the flat earth. I showed that the lines could *not* meet except at an infinite distance. G.M.'s own figure shows the absurdity still better, for his lines *cross* each other like cobwebs. Very appropriate, too, for as the spider spins cobweb out of his own inside, so does the Zetetic spin his theories without any reference to the facts.

(4.) G.M. says observations of the sun do not enable us to determine the sun's position, but only *the observer's latitude*. (This latter admission is rather funny from a member of the sect which constantly answers inconvenient southern hemisphere facts with the assertion that "the movement of the heavenly bodies have nothing to do with the shape of the earth.") But G.M. does not tell us *why* ordinary trigonometry may not be applied to the sun, just as well as to a light on a mountain top.

(5.) G.M. challenges me to show that the observed lines of direction of the sun meet at one point if drawn from a globe, or (which is the same thing) to introduce parallax in his figure 4. I decline, for if I did not draw it to scale G.M. would say it didn't agree with the facts; and if I did draw it to scale I should need a piece of paper 1050 meters long!

(6.) G.M. asks if I am ignorant that the same apparent variation in the sun's altitude will result upon variation in observer's latitude or sun's declination. No, I am not and I took particular care to eliminate the sun's variation in declination by only arguing from the results of *simultaneous* observations at the equinox (or rather from what both sides have hitherto admitted would be the result of such simultaneous observations if made, for I must own I have not myself travelled up and down the meridian with a sextant.)

(1.) Mr. Harpur now introduces a fresh term—the *real direction*—which he does not define, nor indicate how it is to be distinguished from the *apparent direction*. I have never contended that "a thing can be in more than one place at a time." I concede all he can desire, viz., that the lines of sight meet at the sun's centre, as an objective fact. He has now to determine the actual position of the sun's centre, as a mere point, considered mathematically. But this actual position of the point cannot be determined by the art of mortal man.

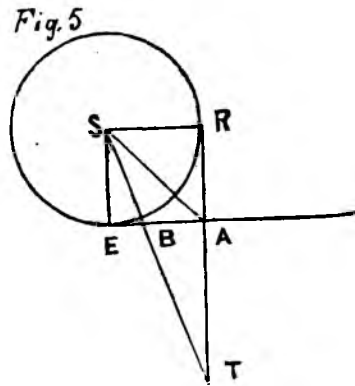
His "real direction" is a meaningless term, even though it be taken to represent the objective fact; for every line of direction derives its significance, subjectively, from its relativity to some other line with which it makes an angle.

In finding his latitude, the mariner deals with the *apparent* direction, this results upon the observed altitude; yet he is not lost upon the trackless ocean because he cannot determine the sun's actual position in "boundless space." Mr. Harpur's assertion is hasty, and is upset by practical navigation.

(2.) Mr. Harpur terms my humorous reference a mistake, which he affects to have twice corrected. Very well,—Now the trigonometrical ratios vary according to the value of an angle at the centre of a circle; he has chosen, quite arbitrarily, the sun as the centre of his "circle of reference," therefore, I say emphatically, that the angles of his table of cotangents are angles at the sun, and are not the angles of the sun's observed altitude above the horizon.

(3.) But as he still persists that his Fig. 2 represents fairly the sun's observed altitudes; and as he substitutes a very puerile attempt at ridicule for solid argument with reference to my Fig. 3, it may be well to exhibit the self-contradictory nature of his own paper.

So adapting the necessary portion of his Fig. 2, we will illustrate in Fig 5, by his own method, the logical results of his reasoning.



S, the sun as centre, E a point upon the equator; S E radius equals unity: E B A a portion of the plane earth's surface: let angle E S B equal  $20^\circ$ , then the distance E B subtending the angle equals  $20^\circ$  of latitude, the comparative value being got from the tables,  $\tan. 20^\circ$  equals . 3639.

(Mr. Harpur copies "Cotan.  $20^\circ$  equals . 3639; this is an error; Cotan.  $20^\circ$  equals 2 . 7475 and is measured along the line R T at right angles to earth's surface, *i.e.* from the heavens above to the abyss beneath—quite a novel direction for terrestrial latitude. E B is the cotan. of the complementary angle B S R; but Mr. Harpur's reasoning is concerning the angle of  $20^\circ$  E S B of which E B is the tangent.)

With increase of latitude, the tangent E B increases to E A, simultaneously the contangent R T decreases to R A.

Obviously upon inspection, the line A S is a diagonal of the square E S R A upon the radius S E; hence each of its sides equals unity, and each of the acute angles at the points S and A made by the diagonal with the sides, is an angle of  $45^\circ$ . Therefore, to an observer at A, the sun's observed altitude (at equinox) is the angle E A S equals  $45^\circ$ , hence his latitude is the angle E S A equals  $45^\circ$ ; its numerical value being that of the tangent E A which equals unity, which equals the sun's vertical distance from earth, *i.e.* the orthodox 93,000,000 miles.

In his Fig. 1 Mr. Harpur instances Bordeaux as  $45^\circ$  latitude, by the method of the geographers, which he accepts as reasonable; but by his method of applying trigonometry he would have us accept the distance of Bordeaux from the equator as 93 millions of miles, instead of about 2000 miles. Surely such a disparity in results must lead even Mr. Harpur himself to see that he has utterly failed to establish any connexion between the sun's distance from earth and the value of the equatorial radius. Or again, the sun's elevation of  $45^\circ$  indicates the station as the point which *bisects* the radius of the equator, but by Mr. Harpur's trigonometry it is the *extremity* of the radius which is shown to be the point at which the sun's observed altitude of  $45^\circ$  is obtained, although he is aware that the extremity of the radius would give the sun's altitude as 0, at equinox. Yet again, the two lines of direction to the sun, which make the equal angles of  $45^\circ$  with the same straight line of the plane earth's surface, at the points of bisection and extremity of the radius of the equator—these two lines are parallel, therefore do not meet at the sun's centre as a *point which can be indicated* with the faintest approximation to precision. Therefore his Fig 2 does not represent the results of actual observation, upon either the spherical or plane earth theories.

As to the spider simile—well, it may be supposed that the three famous laws of Kepler which lie at the foundation of modern physical astronomy, also Newton's Law of Gravitation neither of

which can be fairly demonstrated to positively exist, were the productions of the authors' "insides;" with what admiration then, should we not regard the quality of that "inside" which can educe 93 millions of miles as the value of earth's radius! Clearly Mr. Harpur should rank as Grand Master in this "spinning" business.

(4.) The reference to the southern hemisphere contains no argument relative to my statement as quoted by Mr. Harpur. Could he but divine the simple cause which would be an effective reply to his question—he would then understand how two lines of sight might meet at the sun's centre, and yet that this cannot be reduced to construction as resulting upon actual observation. The simple reason of the inapplicability of ordinary trigonometry to objects in the heavens, as compared with a "light on a mountain top" may be given in one word, thus, trigonometry, in its solution of a triangle, takes no cognizance of perspective; whereas every observation of the heavens is affected by perspective. We may, by our obliging Editor's permission, dilate a little on this subject in a subsequent paper.

(5.) Mr. Harpur has mistaken his vocation in assuming the office of *Prophet*. Were he to present us with his gigantic diagram, I might probably quote his own method of refutation.—"He has merely drawn it so."

The parallelism of lines representing simultaneous observations of the sun from various points of latitude upon a globe is merely a matter of the simplest geometry. Let Mr. Harpur illustrate by diagram, but the proof of his contrary contention must lie in his reasoning, or demonstration.

(6.) For the sake of simplicity, Mr. Harpur was right to confine his attention in his paper to observations at the equinox. But discussion has opened out the question. Well now, here is one other test for him of the simplest character.

Noon at equinox — simultaneous observations — stations at  
 the Sun's  $\left\{ \begin{array}{l} \text{equator—lat } 30^{\circ} - 45^{\circ} - 60^{\circ} - 90^{\circ} \\ \text{observed} \\ \text{altitudes} \\ \text{being} \end{array} \right\}$  respectively the  
 $\left\{ \begin{array}{l} \text{—Zenith } 60^{\circ} - 45^{\circ} - 30^{\circ} - 0^{\circ} \end{array} \right\}$

Mr. Harpur will be very clever if he can show reason why lines drawn at these varying angles with the same straight line supposed to represent a flat-earth, should meet at the same point in the heavens.

G.M.

## THE WONDERFUL STONE.

The present day *educated* generation, appear by the current (so-called Scientific) literature, to find great and absorbing satisfaction in reading Fairy tales; it may, therefore, be well that the following should find a place in this Review, thus giving our readers an opportunity of judging whether the *educated* part of the community are justified in their selection, and also as a means of handing down to the future, a specimen of nineteenth century romance.

Several years ago Sir William Thomson (now styled Lord Kelvin), professor of "Natural Philosophy" and an acknowledged leader of Scientific thought, narrated to a society of "Physicists" the Story of a Wonderful Stone; this story, though then looked on as merely a joke or gammon by his fellow "Scientists" has at different times been ladled out with very learned solemnity by various time-serving and wonder-mongering magazines and newspapers to their gaping and wonderstruck readers, as the story of the most wonderful *scientific* discovery in this most highly educated and scientific age.

Stripping this wonderful story of its long-winded words in which the learned professor arrayed it, let us tell it in plain English.

Once on a time (this is usually how fairy-tales commence), Sir William announced, he had discovered a Stone that was neither more nor less than "The Foundation Stone of the whole Creation;" and that it was the *very stone*, he proved by his professor's gown, his professional dignity and salary, by his university titles, also by his being an eminent "physicist," and, therefore, he had the right to dictate by words of learned length and thundering sound, and by other such arguments, all of which are considered unanswerable much less refutable by this nineteenth century generation. The professor *guessed*, as only an eminent scientist or doctissimus professor can or has the exclusive right to do, that a stone once fell from somewhere skywards how long ago he could not, and, therefore, need not say; but it was *likely*, and indeed he was positive, because it suited his *theory* to say so, that it fell somehow, somewhere, many many millions of years ago (the exact number of millions has been guessed at!) This stone fell, not in the Atlantic Ocean or the river Thames, as there were not such things at the period guessed at; nor did it fall on anybody's head, as there was, he supposed, nobody or nothing in the shape of man, monkey or beast, insect or



cabbage, to be damaged by the fall. Luckily, however, the stone fell somewhere,—hard or soft, he could not really say, nor even guess at, but it fell, and that was sufficient, especially as it fell in the very place that fitted the professor's scientific gospel of Evolution, to which we come later on. How big the stone was he couldn't say, because he or anybody else did not see it. and it would be very unscientific (not to say presumptuous) to question such professional dignity by asking such a thing. Whether the curiosity was of the grindstone, whinstone or cherry-stone order, he did not say: but it was bound to be big enough and able enough to hold a seed of grass or other plant, or in fact, anything that would grow according to Evolution. The professor, however, guessed the stone was certainly a bit of some exploded planet, but to dare ask how he knew, or what planet it was, also the time, cause, manner, etc., of the explosion, etc., would be most unscientific, seeing there were no witnesses of the said explosion; in fact, *the whole affair was a first-class thorough-going supposition*; but mark, not the supposition of such ignorant fellows as Jules Verne, Tom, Dick or Harry; so that, as sure as William is Sir William or (now correctly speaking) Lord Kelvin, this supposition must be dubbed scientific and, therefore, ought to be called an hypothesis. So much for the original fairy-tale.

The mysterious stone indeed was all the more wonderfully mysterious, in that, though guessed by his Lordship to be meteoric, therefore bound to be highly heated and consequently ill adapted for carrying seed, nevertheless, he supposed it did a job which no meteoric stone could do; the professor calling it meteoric for want of some or a better name. Next what makes this stone all the more wonderful is the wonderful seed, which did what no seed has ever been known to do, for it produced (after many millions of years to do the wonderful job) more than one hundred thousand kinds of plants with all their seeds, which are known and unknown to botanists, which seeds have scattered themselves very conveniently for Evolution's sake over all continents and islands, and under rivers, lakes, seas and oceans. Another wonderful thing is, how the wonderful seed managed to grow at all on this wonderful-highly-heated-meteoric stone; but, so many suppositions, deserve this one also, as the supposition, known by the name of Evolution, could not do without it at all; and though "the laws of nature" are said to be "fixed and unalterable," yet it appears they may be altered and generally unfixed at Sir William's pleasure for the sake of his wonderful conjuring stone. God and Moses (whom the eminent

professor never once condescended to notice throughout his tale) have said, that in the beginning was created by God's command, all the plants producing seed after their kind, hence, as the plant, so is the seed; and as the seed, so the plant; such being the fixed order for the past six thousand years, no *fact* to the contrary; yet, since the eminent professor is voted an *eminent physicist*, it follows, that this *scientific* age votes Moses unscientific, or in plain English a *liar*; then what. O my Lord Kelvin, of Jesus Christ, who endorsed, confirmed and spoke so well of the writings of Moses?

However, we may still have more wonders said to be sticking to this wonderful stone, one unnameable seed (by whom or how stuck, let Sir William say) changed, by a wonderful change of "nature's eternal and unchangeable laws" into a wonderful fish, so wonderful, that the like has never been seen since, for it became the *papa* or *mamma* (Sir William does not know or care which) of all the whales, minnows, sharks and other fish that ever swam in salt or fresh water. What next does Sir William suppose about the ten thousand kinds of birds, the one hundred thousand kinds of insects, the one thousand kinds of reptiles, the twelve hundred kinds of lizards, the seventeen hundred kinds of mammals, and Mankind too? So that the enlightened nineteenth century may be led to believe, there is no God to have created all! Sir William must evolve, or as the word means. "roll out," what?—Supposition after supposition, until his dupes are in many cases, evolved, befogged, presumptuous—atheists. Must Sir William believe, that he is whirling and spinning round at brain-reeling-rates on a tremendous turnip-shaped globe of earth and water in somewhere called space, and that the immense oceans with their profound depths, besides all animate and inanimate things, are held on to this whirling-rushing-monstrosity by an assumed power called gravitation, which assumed power is not sufficiently powerful to keep the seed of a thistle, or a butterfly from flying up, nor a grasshopper jumping up, whenever so disposed, thus ignoring this assumed gravitation's tremendous pulling power. And must the titled professor, with others of his way of supposing, believe he and they are the progeny of a gibbering-chattering ape, rather than human beings, made after the image of God? Was Thomas Carlyle very far wrong when he expressed the opinion "that the present generation are mostly fools?"

---

(Collated by Iconoclast, from the writings of Alexander McInnes, of Glasgow University.)

## ZETETIC REFRACTION.

No. III.

By James Naylor.

When once it is seen that a ray of light—whether coming obliquely from the upper regions of the atmosphere to the lower or from lower to the upper—always bends towards the horizontal, many plausible Newtonian explanations evidently become impossible; at the same time also some important Zetetic difficulties cease to exist. Let us give a few illustrations to show what we mean. Take lighthouses for instance, where it is well known that the lights, as a rule, are visible for a much greater distance than the theory of rotundity would allow. Now the ordinary explanation here tendered is that refraction apparently raises the elevated light so as to make it visible for a greater distance than would otherwise be possible, but this explanation is evidently inaccurate, for, as we have seen the effect of refraction from an elevated object is to apparently depress that object and not to raise it. This apparent depression, therefore, shortens the extreme position of visibility and does not lengthen it as the theory of rotundity requires; similar reasoning applies to elevated objects, such as mountains and to the distances at which ships can be seen at sea. For instance, the Alleghany Mountains in the U.S.A. have been observed from the Peak of Teneriffe in the Canary Islands. Ships have also been seen at sea when 200 miles from the observer at the Port of Aden. Now to explain these facts the Newtonians can only urge refraction which, by the way, quite apart from our argument, seems scarcely sufficient in these cases, seeing that, in the former, it would make the Alleghanies appear more than 700 miles above their true position and, in the latter, about 26,000 feet. But we have seen that refraction does not tend to seemingly raise relatively elevated objects, but rather to depress them, and the ordinary explanation, therefore, becomes inadequate, and only makes confusion more confounded.

With celestial objects it is just the same, the Pole Star to wit, has been seen many degrees south of the Equator, at which point according to theory it would cease to be visible. The Sun, Moon and Stars also all appear earlier and set later than the times that theory assigns to them; and again, in all these cases, refraction is made to seemingly render friendly help. But alas, in this case the Newtonian may well say, "save me from my friends" for we see that the effect of refraction is just to reverse the positions and to make the celestial objects appear later and set earlier than they would, but for its operation. So also in the case of the Pole Star,

the effect is to shorten the extreme point of visibility and not to lengthen it as appears to be the case.

Take also the matter of Horizontal Eclipses where the Sun and the Moon appear above the horizon together, and yet the latter is seen to be eclipsed; here we have refraction again brought in to explain the difficulty. But we now see that the explanation must be perfectly useless and that refraction really adds to the difficulty instead of removing it. Indeed, we may say that as the phenomenon stands without any explanation, the Newtonian is figuratively chastised with whips, while, to drag in refraction, he is chastised with scorpions. In short, these illustrations clearly show that all along the line Zetetic refraction puts an end to the seemingly plausible Newtonians explanation of phenomena that left unexplained are irreconcilable with and condemnatory of, modern astronomical theory.

We will now see how it fares with some difficulties of Zeteticism and first as to why celestial objects do not always appear above a plane earth instead of rising and setting as we know they do. This is a very common difficulty and one which *Parallax* on pages 124 to 127 of his book does not wholly remove. Now, here Zetetic refraction comes to render yeoman service for it shows that besides the explanation of the decrease in the visual angle which *Parallax* gives, there is also an apparent decrease of elevation from refraction. In short, that while the visual angle creates the impression of decreased elevation, refraction completes that impression, by apparently still further depressing the object under review. Unless then it can be shown, that the effect of these combined causes is insufficient to explain the rising and setting of celestial objects over a plane earth, the difficulty we have cited has no solid foundation and may be summarily dismissed.

Another difficulty closely allied to the preceding is the fact that angles made by the Sun when viewed from different standpoints on the same meridian, do not correspond with what geometrically should be the case; and here it may be freely conceded, that these angles far more nearly correspond with the common theory than with Zeteticism, though not so completely as some Newtonians would have us believe. But when Zetetic refraction is applied the difficulty vanishes, for from it we see that the apparent angles can never be geometrical ones, but only accidental or empirical, and of such a sort as cannot be determined by some *a priori* rule, but must be deduced from actual observation. With refraction playing pranks amidst the real angles and substituting others of its own

creation, whose relation to the real ones cannot be ascertained, it is evident that accuracy from angular measurement is scarcely to be expected, and indeed is not conceivably possible. It was the neglect of this consideration that made C. HARPUR'S argument in a recent number of the *Review* to appear so formidable on paper and so absurd away from it. Indeed, so long as refraction exists, the same fate must fall upon all attempts to disprove a plane earth, by showing that some celestial phenomena in which refraction must perforce be the all controlling, but unknown quantity is inconsistent with the plane earth position. The same consideration also forbids any positive statements as to the distance of the heavenly bodies above a plane, for, as these distances can only be determined by the measurement of angles, and as the observed angles can in no sense correspond with the real ones, all positive statements are evidently rendered futile and the best results can only be considered as approximate.

But, besides destroying Newtonian explanations and removing Zetetic difficulties, refraction furnishes important corroborative testimony to the fact that the Earth is a plane. For instance it is well known that when the atmosphere is clear and free from humidity or any cause likely to retard the progress of light that then we have objects seen at much greater distances than is normally the case. At those times the amount of refraction of necessity is less, and upon a plane earth, objects would, therefore, naturally be seen longer than usual. But not so with rotundity, for with it when the atmosphere was clear and refraction scarcely present, objects would disappear at the stated distances, prescribed by theory. In other words, in clear weather and with refraction operating as we have described, objects upon a plane earth would be visible longer than usual, just as we find to be the case. But with a globular earth the reverse would follow, for in clear weather objects would be seen shorter than usual, a position which is demonstrably contrary to fact and logically absurd. Thus the right view of refraction furnishes cumulative evidence for a plane earth, by accurately accounting for phenomena whose peculiarities can only be reconciled with such a fact.

The devastation caused by Zetetic refraction among Newtonian havens of refuge from difficulties, will naturally cause the stoutest opposition to be offered to the former. We will, therefore, in our next and concluding article compel the acceptance of our position, or else place the Newtonians upon the horns of a formidable dilemma.

(To be continued).

## THE SUN-DIAL.

BY "ZETETES."

"He hath founded the earth upon her bases, that it should *not be removed for ever.*"—Psa. civ, 5 (Margin).

WE have been taught from childhood to believe that the world we live in is a large ball or globe, revolving on its axis, and moving through space at a terrific rate; and what is perhaps more to be regretted, we have never been taught to investigate these things for ourselves, but to receive as infallible all that is taught us by learned men in the name of science. But since much that is called "science" is directly contrary to God's Word, and is leading men to doubt, to question, and to deny that Word, it is quite time that Christians should make a stand, and begin to question the other side. If the world be a revolving globe, as astronomers and infidels say it is, we ought to have some demonstrable proof of it. But where is this proof? And, on the other hand, if the earth be a stationary and outstretched plane, as the Bible teaches it is, there is surely some simple way of proving this. Astronomy shrouds the question in figures and mystery, and pretends that it is above the conception of ordinary minds; but the Bible again and again refers to the works of the Creator as being understandable and sought out of all them that have pleasure therein. Psa. cxi. 2, 4.

Let us take one instance. The Bible teaches that day and night are *caused* by the motion of the *Sun* over a stationary Earth; whereas Astronomy affirms that it is the earth which moves, and not the Sun, as the *cause* of day and night. Gen. i, 16; Josh. x, 12, 13; Psa. xix, 4-6, and civ, 5; Matt. v, 45; Luke iv, 5. Now one of these two positions must be wrong: they cannot both be right! Which is it, "Science" or the Bible? Genesis or the Principia? The Prophets or the Astronomers? Our own senses tell us it is the *Sun* which moves, and not the earth; but the Astronomers say that we must not believe our senses in this matter, as they only deceive us! But can we not find, some other impartial witness? Yes! The sun-dial shall testify; or rather the sun itself, as it shines above us in the heaven. Isa. xxxviii, 8.

Now if, as we contend, the Sun moves around the North Centre, above a plane and stationary Earth, it is evident that the gnomon (stile, pin, or column) of the sun-dial will cast a shadow which also moves in some part of a circle, or ellipse. At the north centre the shadow will describe a semi-circle in twelve hours, as the sun circled about it; but in our latitude it would describe a semi-

ellipse, or elongated *curve*. On the other hand, if the earth turn on its axis before a relatively stationary Sun, directly above or near the equator, the end of the shadow on the sun-dial would describe a *straight line*, on or parallel to the equator. This, can be tested by a simple experiment or two.

Place a small upright column (a narrow bottle, or a piece of wood) in, or near, the centre of a stationary table in a darkened room; then carry a lighted candle close around and a little above the table, so as to cast a shadow on the table. It will be seen that the end of the shadow cast by the column will describe a *curve* more or less circular. Next take a paste-board globe and fasten on to it a piece of wood, as a gnomon, perpendicular to its surface, and somewhere north of, or near to, the equator. Then, holding your candle quite still somewhere opposite, or nearly opposite, to the equator, turn your globe on its axis perpendicularly, and you will find that the end of the shadow of the gnomon will describe a *straight line*. If the gnomon be placed on the equator, while the sun or light is also opposite to the equator it is evident that the shadow *must* fall on the equator somewhere the whole of the twelve hours, and so it would describe a straight line; and if the gnomon be placed north of the equator, while the sun is on, or opposite to, the equator, it is also evident that, as the sun apparently traverses the line of the equator during the day, the end of the shadow of the gnomon would also describe a straight line north of, but parallel to the equator! Thus, all our shadows ought to move in straight lines on horizontal planes if the common theory were true.

But again, take an upright rod, or pole, and fix it perpendicularly in your garden, somewhere so as to catch the rays of the sun all day, and then watch the shadow of the rod for about twelve hours or more. Every quarter of an hour place a small stone, or better still, fix a small stake at the extremity of the shadow; and then at the end of the day you will have the line described by the shadow. You will find it to be a *curve*! In London, about the beginning of May, the curve formed in twelve hours is the half of an ellipse, the greater diameter of which is about three times longer than the shorter diameter. Test it in different places, or in the same place at different times; and you will have the data for proving the Sun's own peculiar motion above a stationary Earth! The same data also go to prove the distance of the Sun from the Earth, and that the Sun is never more than three or four thousand miles off! This may be shown by *plane* triangulation; just as we measure the height of a tree, or a church steeple, etc. Thus the shadows of the Sun faithfully and silently testify that the Bible is right, and that "science" has, in this matter at least, been "falsely so-called." I. Tim. iv, 20.

Truly the heavens declare the glory of God, if we only know how to read them aright. The shadows, like the handwriting and words of the angel, are indeed written upon the wall; but cannot the wise men of Babylon, the astronomers, the stargazers, and the soothsayers, make known the interpretation thereof unto the king? By the shadow of a column in a square, by the shadows of the lamps in the streets, by the shadows of the trees in the fields, and in a hundred other ways, does the Sun (and the moon), like a faithful witness in heaven, silently and daily give evidence of the truth of God, and the lie of the Serpent. Psa. lxxxix, 37. It testifies to its own proper motion, and to the immovability of the earth. Psa. xix, 6; I Sam, ii, 8. Nature and the Word of God have one voice; and they both speak the Truth. They both alike testify that the "lights" of Heaven *above* circle around an "outstretched" and stationary Earth *beneath*; and that this Earth (or "dry land") again rests, like a great float, upon the waters of the great deep, or "abyss," *below* the Earth. The fact that the surface of these waters is *level* also proves it. All the ancients believed it, the prophets, and wise men of old; the Apostles, and early Christian writers; our own forefathers; in short it has been the belief of all the best men in the world for over five thousand years! See Gen. i, 2, 10; and xlix, 25; Ex. xx, 4; Psa. xxiv, 2; and civ, 6; Luke viii, 31 (Rev. Ver.); and Rev. xx, 3.

"If it shall turn out that Joshua was superior to Laplace, that Moses knew more about geology than Humbolt, that Job as a scientist was the superior of Kepler, that Isaiah knew more than Copernicus . . . then I will admit that infidelity must become speechless for ever." Ingersoll's Tilt with Talmage.

#### THE CONTENTS OF OUR LETTER BOX.

Dear Leo Castle,—Thank you for your encouragement. It is helpful at all times when we encounter so much opposition. My meeting was a success, but we did not have as much opposition as I could wish for. I enclose 7/6 as a thank-offering for your kindness to us. This small amount represents the goodwill, the kindly sympathy, and the humble efforts of some of the working men in South Shields, who attend our open-air meetings.

It is with heartfelt thanks that we acknowledge receipt of above "thank-offering" from the open-air Church, Market Place, S. Shields. Such contributions are exceedingly encouraging as it is practical evidence that their hearts are in the work, and not merely their lips.—[ED.]

Dear Sir,—The "Earth Review" is better than ever this quarter. The article on "Universal Gravitation" is a bomb in the globular camp that they

cannot extinguish! When shall we have our "Review" monthly? It is most urgently needed, I will do my very best to make it better known. The astounding admissions made by a man of such "scientific" eminence as Professor W. B. Carpenter, respecting the fundamental basis of Newtonian astronomy which he and others have carefully educated the Public into believing to be a verified and demonstrated law of nature, is crushing evidence against the globular theory. This must certainly contribute to a wholesome reaction, and cause a little more respect for Biblical astronomy and cosmography which is at all points irreconcilably opposed to modern astronomy—and is like a dash of cold water in the face of that "public opinion" which they have carefully manufactured. "The mills of God grind slowly—but they GRIND!"

R. BRADLEY.

Dear Sir,—The proceedings of our rotundity friends, from time to time, reminds me very forcibly of an old saying which I have heard repeated many times, viz.—"Let them have plenty of rope, and they will hang themselves." The proceedings to which I allude are the levelling operations of which we frequently hear. In looking over the Parliamentary reports of a discussion in 1867, on the Suez Canal question; I find that after a long discussion they concluded that there was not a difference of 30 ft. but only 2 ft. 6 in. between the level of the two seas. But the Astronomer Royal said that he was tolerably familiar with the work in French which was drawn up by the joint commission of Engineers of which the late Mr. Stevenson was one, and his impression was, that after correcting the enormous errors in previous surveys, he found no perceptible difference in the mean level of the two seas! He would be glad to be certified whether there was, in fact, a difference of 2 ft. 6 in. between the

mean levels. In reply Sir W. Denison said, he was assured by the French engineers on the works, that the MEAN LEVEL OF THE TWO SEAS WAS THE SAME. [Mediterranean and Red Sea]. In the *Echo* of June 6th 1887, I read, "In the report on the Panama Canal submitted to the Academy of Sciences by Mr. Bouguet de la Grye, who is, says the *Times* Paris Correspondent, "the highest authority in such questions," he states that it would be quite useless to construct locks. HE REMARKS THAT NO DIFFERENCE OF LEVEL CAN EXIST BETWEEN THE ATLANTIC AND THE PACIFIC.

Then in the quotation by you from *The Age*, of Aug. 5th, 1893, respecting the Baltic and North Sea Canal, we are informed that THE SURFACE OF THE TWO SEAS ARE LEVEL. Next we have a report of recent levelling operations carried on in Russia. See *Daily Chronicle*, Feb. 12th, 1895, in which we read, "The deadly flatness of the great plain of Russia is remarkably shown by the levelling operations now completed." Accurate observations were made at 1,090 stations, yet the highest point noted was 1,086 ft. A more important, though less expected, result was THE ESTABLISHMENT OF THE IDENTITY OF LEVEL BETWEEN THE BALTIC, BLACK, AND AZOFF SEAS. Well, if the Mediterranean, the Red Sea, the Atlantic, the Pacific, the Baltic, North Sea, Black Sea, and the Sea of Azoff are level; we may soon have to ask where we are to find rotundity. We may have to wait for an answer as notwithstanding these surprising discoveries of level surfaces, no doubt ships will still follow the natural order of things, and on these level surfaces disappear as heretofore, viz., "Hull first."

Yours truly,

R. ALFREY.

Sir,—In the latest text book on "The Movements and Shape of the Earth," by J. Norman Lockyer, F.R.S., &c., &c. *ad lib.*, I find chap. III. headed "The Earth is a sphere," and this without the slightest attempt of proof in the two preceding chapters,—this method is known as begging the question, in the most beggarly manner too—however, the Professor proceeds to quietly trot out the "Vanishing Ship Trick," which is dubbed a *familiar fact* in proof of sphericity, and then cites the disappearance of the constellations The Pole Star and The Great Bear, on sailing south; lastly, the "Analogy Juggle" is performed, viz., as the sun, moon, and all the known planets are round (spherical) therefore the earth must be also; this surely may be called "A scientific-physiographical-climb-down," for where and oh where are the other so-called proofs of the schools? echo answers, gone where the above mentioned three must eventually go!—to the lumber heap.

Further on in the same *enlightening primer*, the *supposed* movements of this *supposed* sphere are *assumed* to be proved by sundry humming-top arrangements called "Gyroscopes," pretty illustrations of which are given, and then follows Mons. Foucault's smashed-up "pendulum business," just to attempt to put some sort of face of reality on the fraud, and still more entangle the dupes who are compelled to cram themselves with such husks, to procure Government and Clerical appointments, whereby to secure an existence; meanwhile the professors who ladle out such stuff and nonsense, complacently pocket the fees, and adorn each other with long sounding titles, such as, F.R.A.S., F.M.S., and A.S.S.

Yours respectfully,

H. H. SIMS.

Dear Sir,—Herewith by this post I send back MSS. and cuttings for the use of which I am extremely obliged.

The information on the dipping needle is very good and will be useful, I find people often ask questions about things they do not understand anything about.

The article on Gravitation in last issue is the very thing required, and proves that they have exploded their own globe!

In levelling, I work from ordnance marks or canal levels to get the height above SEA LEVEL.

I nearly always use canal levels, knowing that within six inches the levels are always the same I work sometimes from what is known as the Wolverhampton Level, this is said to be 473·19 ft. above the SEA LEVEL; sometimes I work from the Birmingham LEVEL, this is said to be 453·04 ft. above the SEA LEVEL. Sometimes I work from the Walsall LEVEL, this is said to be 407·89 ft. above the SEA LEVEL. The puzzle to me used to be, that though each extends several miles *each level was and is treated THROUGHOUT its whole length as THE SAME LEVEL FROM END TO END; not the least allowance being made for curvature*, although if the earth be a globe, 112 feet ought to be allowed.

In the following levels I give distances in miles ignoring fractional parts. Each level is connected by locks to the others, but there is no lock from end to end on the levels. I do not take any notice of bends, but take straight lines from point to point. Let us take the highest level first:—The Wolverhampton Level, viz—

	473·19 ft. from the end of the
first	Cannock extension to Smethwick
line	is 13 miles. $13 \times 13 = 169 \times 8 = 648 = 112$ feet,
second	Cannock to Whiton, 9 miles
	fall = 54 feet.
third	Whiton to Smethwick, 9 miles
	fall = 54 feet

Let us now take the Middle Level, viz.—The Birmingham Level 453·04 feet.

first	Birmingham to Tipton, 7 miles
	fall = 32·8 feet.
second	Tipton to Selly Oak, 8 miles
	fall = 42·8 feet.

Let us now take the Lowest Level, Walsall.

This is 407·89 feet above the Sea LEVEL.

first	Walsall to Great Bridge, 5 miles
	fall = 16·8 feet
second	Clarke's Lane to Perry Bar Stop,
	6 miles fall = 24·0 feet.

No matter what part of the level is used in each, the same figure is used as given above for each separate level, whether the ends or the middle, no allowance for the "curvature" said to exist is ever thought of let alone made. The study of "Earth not a Globe" by "Parallax" sets the matter in its proper light, In a conversation with

one of the Civil Engineers in this district, after some amount of argument on each side as to the reason why no allowance for curvature was allowed, he said, he did not believe anybody would know the shape of the earth in this life.

Yours faithfully,

T. WESTWOOD.

### ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o Mr. J. WILLIAMS,  
32, Bankside, LONDON, S.E.

C. HARPUR.—Thanks for your letter, which we cannot insert.

H. VETTERLING, and others writing on the *same* subject.—When absolutely practical measurements South of the Equator are made, we are sure that they will be in confirmation of *the fact* that the "Earth" is a vast irregular Plane. It is an utter impossibility for one fact to contradict or set aside another fact. Zetetics South of the Equator are seeking the desired information. We accept Truth from anyone. May we suggest that your question; in fact ALL questions relating to the subject, "In what direction did Mr. C. E. Borchgrevink see the Southern Midnight Sun," be sent direct to that gentleman, and his answer sent direct to us for publication. His answer should be confirmed by the signature of the whole of the crew, for the cabin-boy's statement on such a matter is equally as good as any Professor's. Thanks for papers sent.

J. BRADLEY.—Hearty thanks for your promised help. The quotation, "We shall take for granted from the outset the Copernican system of the World," etc., will be found in *Herschel's Astronomy*, p. 4, 5.

G. H. COWPER.—Thanks for your kind letter and cutting. We have no reasons to believe that the statements made by Mr. Borchgrevink are either true or false, anyway they do not affect the fact that the surface shape of water everywhere is LEVEL.

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review." at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon Sec., post free, to any address in the postal union for 10d. per year, in advance.

All monies for the Society must be paid direct to the local Vice-Secretaries, or direct to the Hon. Secretary and Treasurer, Jno, Williams. Post Office Orders to be made payable at Sumner Street, S.E.

# —THE— EARTH-NOT A GLOBE-REVIEW.



A Sectional View of the World as a Plane.

VOL. I. No. 1 (MONTHLY SERIES). APRIL, 1896.

PRICE 1D.

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

NO. III.

Dedicated to THE EDITOR of *Reynolds's Newspaper*.

The silent admission of the impregnable position of Zeteticism leads us to believe that the Editor of *Reynolds's Newspaper* has read the following or similar extracts:—

"We have any quantity of hypotheses thrust upon us as discoveries, which are merely false knowledge that later science will have to *unlearn*! As a matter of fact the fashionable notions which are paraded as Science stand only because their advocates shut their eyes to realities, make assertions with little or no fact to start from, ignore the facts which do not suit them, refuse to meet objections, and ignore any really scientific (that is provable) explanations which do not agree with the specialistic facts."—SIGMA, *English Mechanic*, Oct. 5th, 1894.

"The repetition of a blunder is impertinent and ridiculous. To liberate oneself from an error is difficult, sometimes indeed impossible for even the strongest and most gifted minds. But to take up the error of another, and persist in it with stiff-necked obstinacy, is a proof of poor qualities. The obstinacy of a man of originality when he errs may make us angry, but the stupidity of the copyist irritates and renders us miserable. And if, in our strife with (Sir Isaac) Newton, we have sometimes passed the bounds of moderation, the whole blame is to be laid upon the school of which Newton was the head, whose incompetence is proportional to its arrogance, whose laziness is proportional to its self-sufficiency, and whose virulence and love of persecution hold each other in perfect equilibrium." "Through the whole of Newton's experiments (?) there runs a display of pedantic accuracy, but how the matter really stands, with Newton's gift of observation, and with his experimental aptitudes, every man possessing eyes and senses may make himself aware. It may be boldly asked, where can the man be found, possessing the extraordinary gifts of



No matter what part of the level is used in each, the same figure is used as given above for each separate level, whether the ends or the middle, no allowance for the "curvature" said to exist is ever thought of let alone made. The study of "Earth not a Globe" by "Parallax" sets the matter in its proper light. In a conversation with

one of the Civil Engineers in this district, after some amount of argument on each side as to the reason why no allowance for curvature was allowed, he said, he did not believe anybody would know the shape of the earth in this life.

Yours faithfully,

T. WESTWOOD.

### ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o MR. J. WILLIAMS,  
32, Bankside, LONDON, S. E.

C. HARPUR.—Thanks for your letter, which we cannot insert.

II. VETTERLING, and others writing on the *same* subject.—When absolutely practical measurements South of the Equator are made, we are sure that they will be in confirmation of *the fact* that the "Earth" is a vast irregular Plane. It is an utter impossibility for one fact to contradict or set aside another fact. Zetetics South of the Equator are seeking the desired information. We accept Truth from anyone. May we suggest that your question; in fact ALL questions relating to the subject, "In what direction did Mr. C. E. Borchgrevink see the Southern Midnight Sun," be sent direct to that gentleman, and his answer sent direct to us for publication. His answer should be confirmed by the signature of the whole of the crew, for the cabin-boy's statement on such a matter is equally as good as any Professor's. Thanks for papers sent.

J. BRADLEY.—Hearty thanks for your promised help. The quotation, "We shall take for granted from the outset the Copernican system of the World," etc., will be found in *Herschel's Astronomy*, p. 4, 5.

G. H. COWPER.—Thanks for your kind letter and cutting. We have no reasons to believe that the statements made by Mr. Borchgrevink are either true or false, anyway they do not affect the fact that the surface shape of water everywhere is LEVEL.

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon Sec., post free, to any address in the postal union for 10d. per year, in advance.

All monies for the Society must be paid direct to the local Vice-Secretaries, or direct to the Hon. Secretary and Treasurer, Jno, Williams. Post Office Orders to be made payable at Sumner Street, S.E.

# EARTH-NOT A GLOBE-REVIEW.



A Sectional View of the World as a Plane.

VOL. I. No. 1 (MONTHLY SERIES). APRIL, 1896.

PRICE 1D.

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. III.

Dedicated to THE EDITOR of *Reynolds's Newspaper*.

The silent admission of the impregnable position of Zeteticism leads us to believe that the Editor of *Reynolds's Newspaper* has read the following or similar extracts:—

"We have any quantity of hypotheses thrust upon us as discoveries, which are merely false knowledge that later science will have to *unlearn*! As a matter of fact the fashionable notions which are paraded as Science stand only because their advocates shut their eyes to realities, make assertions with little or no fact to start from, ignore the facts which do not suit them, refuse to meet objections, and ignore any really scientific (that is provable) explanations which do not agree with the specialistic facts."—SIGMA, *English Mechanic*, Oct. 5th, 1894.

"The repetition of a blunder is impertinent and ridiculous. To liberate oneself from an error is difficult, sometimes indeed impossible for even the strongest and most gifted minds. But to take up the error of another, and persist in it with stiff-necked obstinacy, is a proof of poor qualities. The obstinacy of a man of originality when he errs may make us angry, but the stupidity of the copyist irritates and renders us miserable. And if, in our strife with (Sir Isaac) Newton, we have sometimes passed the bounds of moderation, the whole blame is to be laid upon the school of which Newton was the head, whose incompetence is proportional to its arrogance, whose laziness is proportional to its self-sufficiency, and whose virulence and love of persecution hold each other in perfect equilibrium." "Through the whole of Newton's experiments (?) there runs a display of pedantic accuracy, but how the matter really stands, with Newton's gift of observation, and with his experimental aptitudes, every man possessing eyes and senses may make himself aware. It may be boldly asked, where can the man be found, possessing the extraordinary gifts of

Newton, who would suffer himself to be deluded by such a *hocus pocus* if he had not in the first instance wilfully deceived himself? Only those who know the strength of self-deception, and the extent to which it sometimes trenches on dishonesty, are in a condition to explain the conduct of Newton and of Newton's school. To support his unnatural theory, Newton heaps fiction upon fiction, seeking to dazzle when he could not convince."—GOETHE. *Proceedings of the Royal Institution of Gt. Britain.* Vol. ix., part iii., p. 353.5.

"It has, over and over again, been the hope and expectation of intelligent and unprejudiced men that some less extravagant and more intelligible system would, sooner or later, be found as a substitute for the mathematical romance with which Newton has favoured the World. This name has been the sanction for a device which, the more it is examined, excites the more astonishment at its adoption by men of research and observation."—*Dr. W. Friend.*

From the preceding extracts we hope it will be seen and admitted that there can be no true system of astronomy, till the laws and demonstrable facts of *terrestrial* physics are thoroughly understood—not from "text books" and the assumptions of Modern Professors, but from *the same practical evidence* as the purchaser of an estate would require ere he paid his money or was satisfied with his possession.

"Muster your wits; stand on your own defence,  
Or hide your heads like cowards, and fly hence."

—SHAKESPEARE.

11th. It has been dogmatically and arrogantly asserted that 'no one who understands the Newtonian theory questions its truth;' so that those who question its truth are treated as not understanding it. If this style of argument, or rather dictation, were allowed to prevail, discussion would be suppressed, and progress in Science interdicted. The Newtonian definition of Weight is that 'it is the *effect* of Gravity (*i.e.*, gravitation); the measure of the force of gravitation on bodies of different densities.' I propose to show that this explanation is sheer nonsense. Gravitation has no weight; how then can it give to something else, that which it does not itself possess? I offer the following definition of Weight. "*Weight is that inherent property of matter which causes any body according to its density to take the most direct path possible to its level of stability or equilibrium.*" This is the reason why *smoke ascends* to a stratum of atmosphere where it can find its level, and why a stone falls to the ground, because there only is its proper resting place. The Newtonian asserts that if it were not for the 'attraction of Gravitation,' ourselves and our possessions would fall off into space, unless indeed we took root in the soil and lost our power of locomotion; but according to my definition of Weight, nothing could fall off the earth into space, because nowhere else but on the earth could any object so readily reach its level of equilibrium.\*

*The New Principia* by NEWTON CROSSLAND.  
(To be Continued)

[\*This is true when the Fact of the earth's configuration as a vast irregular plane is admitted, but not when it is considered to be a "globe," as it is by this authority.—ED.]

## BIBLE ASTRONOMY.

### A DEFENCE AND TESTIMONY.

By J. SMITH, Esq.

It may be that some readers of *The Earth not a Globe—Review*—have read an article that appeared in *Zion's Watch Tower* (May 15th, 1895), and a small Zetetic tract entitled "*Bible Astronomy.*" Some readers not well established in the truth may have had their minds disturbed and unsettled by its specious reasonings. "Z.W.T." professes that it will review the tract from a "*Bible stand point and from that stand-point ONLY.*" A careful reading of the various sections will shew clearly that almost every assumption is of the stereotype and orthodox modern science style, and *not scriptural at all!* This we will now prove. We are to'd that "discoveries, deductions and suggestions of all past time, have greatly advanced Astronomical Science? . . . Nor should it be a matter of surprise, that while God has been disclosing the wonders of His grace to His people, He has also been paving the way . . . for a more correct idea of His no less wonderful creation." And further, "that while *it is true* that gross error with reference to spiritual things has marked the steps of great ecclesiastics, &c., . . . quite the opposite is true of Science, Art, and Mechanics," and the explanation is that "spiritual things are spiritually discerned. But the great truths of nature are not so learned."

With the latter sentence we quite agree, but while many *details* of natural things are not made known by revelation, yet so far as God has been pleased to reveal His works of creation in the Bible they are to be believed by those who hold the Bible to be the Word of God, and readers only need to refer to the past editions of this journal to find abundant proofs that while modern philosophers have been tracing the steps of so called Modern Astronomical Science (!) the greatest mistakes, inconsistencies and contradictions have marked their so-called progress? *e.g.* Have they not been ever shifting the sizes and distances of all the orbs of heaven, fixing the sun at ever-varying distances from 44,000 miles (Pythagoras) to 184 millions (Mayer) of miles from the earth? And further, have we not been asked to believe that by some assumed process of evolution in the unknown past history of time the planet earth was but a gaseous scintillation discharged from the sun which gradually cooled from its gaseous condition till ultimately it condensed into its present liquid and solid form, &c., &c., whilst the Bible plainly teaches us that the Heaven and Earth were first created; and that the

sun, moon, and stars were made on the 4th day: thus giving the lie to the modern theory of a sun-begotten-planet-earth. We have only to use our God-given intellect to know that the earth and seas constitute the great terrestrial part of the universe inasmuch as travellers and sailors have traversed thousands of miles over its surface in several directions, whilst the sun, moon and stars are so far removed from close observation that it is most likely we shall never fully know either their size, or their distance from us. "Z.W.T." presumes that if the earth is a plane floating on the waters "that the seas must in turn be supported by *something tangible*, and that in turn by something else, *ad infinitum*." As if God had no means of supporting the earth and seas upon foundations devised by wisdom and power upon a plan never revealed to and not to be known by us. 1 Sam. ii. 8, and Job xxxviii. 4-6, &c., and Jer. xxxi. 37, Ps. xxiv. 2.

## SECTION 1.

In this section we are told—(a) "That the air envelops the earth to a distance of about 50 miles from the surface."\* Is that a Scripture proof, or a modern theoretical guess? (b) "That it has been suggested (by whom?) and *apparently?* with *good evidence (not produced)*, that before the deluge the volume of water above the firmament or aerial heavens was much greater than now, and that the waters below the firmament were correspondingly less, that the earth at that time *probably (?)* had a ring of water similar to the several rings of saturn: the *theory* being that the precipitation of the water of that ring produced the deluge, &c."† If there be any ring of truth in all this sentence it is in describing the whole thing as a "*theory* i.e. *speculation*," the Scripture proof being wanting.

\* We deeply regret that our critic did not look up current astronomical teaching upon this subject, for then he would have found that this guess of 50 miles has been supplanted by another guess which we quote for his learned consideration:—"We may infer that a few hundred miles embrace all the gaseous envelope of the globe."—*Science Siftings*, March 18th, 1893. He might also have found that "the height of the atmosphere is NOT known with any certainty. There is probably no fixed limit to the atmosphere."—*Elementary Physiography*. p. 293.—Ed.

† Evidently the outcome of "Vail's Annular World" theory taught in California.—Ed.

## SECTION 2.—THE SKY A SUBSTANTIAL VAULT.

Here the "Z.W.T." adopts the usual style of many modern theologians who endeavour to reconcile the Bible and Modern Science, by describing *plain words of Scripture relating to matters of fact* as "highly figurative and poetic as Amos ix. 6, Job xxxvii. 18, Is. xl. 22."

## SECTION 3.—UP. DOWN. SUNRISE AND SUNSET.

(a) If it were true that all planists believe that the sun, moon, and stars move in a plane above the earth; "Z.W.T." is distinctly in error in declaring "such motion to be in direct opposition to their theory?" inasmuch as both by experience and custom, and also according to optical laws, it is quite correct to say that the sun rises or sets as it is manifest to the senses that it does. So in respect of the *natural horizontal datum line* called the horizon, which is the rule or standard to which all varying elevations of objects are referred, and by which objects are said to be higher or lower as they are seen above or below such line whether actually or perspective.

(b) While the expression, "Four corners of the Earth," could have no literal signification in reference to a ponderous Sea-Earth-Globe such as is taught by the Newtonian philosophy. How forcible it is when used in respect of the Earth spread out upon the waters as declared in the Scriptures, as Ps. xxiv. 2; 2 Peter iii. 5., &c.

## SECTION 4.—SUN AND STARS EARTH'S ORNAMENTS.

"Z.W.T." tells us that God was not attempting to teach Astronomy (we say modern Astronomy?) but leaving such things for mankind to investigate." Can any intelligent and unbiassed reader peruse the words recorded in Gen. i. 14-18, without being convinced that the very thing taught is *the truth* in regard to the creation, and the uses of the sun, moon, and stars, and as if the Lord would place it beyond doubt or controversy, He thrice repeats the special object for which they were created. "Z.W.T." says (page 118): "Sun and stars were *caused to give light* to the earth . . . and were intended to do so, but there is nothing to indicate that they could not lighten *other planets*." Is that not twisting and warping the Scriptures to give a diametrically opposite sense to what is given in them? Gen. i. 15 distinctly says: "Let them *be for lights* in the firmament of heaven TO GIVE LIGHT UPON THE EARTH; and IT WAS SO;" but to suggest that they were *merely caused to give light* as a kind of *secondary service*, whilst their primary service was withholden for man to discover, is too absurd to be received even on the authority of "Z.W.T."

## SECTIONS 5 AND 6

needs no comment beyond simply observing the usual poetic licence introduced to cover up the deficiency of interpreting the true and plain teaching of literal scriptures as to pure matters of fact.

## SECTION 7.—SUN AND MOON STOOD STILL. (Josh. x. 12-14.)

This clear and unmistakable passage of scripture, "The Sun stood still," has baffled every attempt at reconciliation with the teaching of modern theories, though often attempted by many good meaning men,

neither are we any nearer by the two theories suggested by "Z.W.T."—both of which, instead of being Bible proofs, are diametrically opposed to its plainest teachings. The theories suggested are—(a) "That by *some* miraculous process the rays of the sun were refracted by clouds specially arranged for the purpose"; or, (b) "that even if the earth was *slowed up* in her diurnal motion, it would be equally proper to say that the sun hastened not to go down"; or, we think it is highly *improper* to say "that clouds refracted the sun's rays"; and equally *improper* to say "that the earth slows up, &c." When the Scripture repeats the fact that the "sun went down," "the sun stood still," can anything be more unscriptural or improper than to attribute to the "earth which is fixed upon foundations" a diurnal motion to get its light, when the Scriptures declare it to be the sun that *moves* in its circuits to give light upon the earth? We prefer to let God be true, though all modern philosophy be untrue.

#### SECTION 8.—EARTH FOUNDED AND IMMOVABLE.

Z. W. T. in this section surpasses itself; for whilst on page 116 it professes the "necessity of a material earth being sustained on something tangible, &c., *ad infinitum*," it reminds the "intelligent and *thoughtful* reader that there are other foundations than *stone ones*, adding, that principles as well as things, have foundations." As for instance, "Justice is the habitation of God's Throne (Government)." But is the foundation of God's Throne, viz. (the attribute of Justice), the foundation of the material earth? If not, where is the point in the argument? In wisdom He hath made all His works, and hath appointed suitable foundations for His works, whether of a spiritual or material order. But while "Justice is the foundation of His Throne (spiritual), He hath appointed such physical foundations for the earth and seas as it hath pleased Him in His wisdom." See Job xxxviii. 4-6, Ps. xxiv. 2, Ps. xciii. 1, Ps. civ. 5, Jer. xxxi. 37, &c.

#### SECTION 9.—AN IMPORTANT PASSAGE OVERLOOKED

"*He hangeth the earth upon nothing.*" Job xxvi. 7.

Z. W. T. says "The advocates of the flat earth idea *seem* to overlook (this) the only text of scripture which *really* has to do with the subject." We deeply regret to see that the Editor of "Z.W.T." here confesses his ignorance of what the "advocates of the flat earth idea" overlook, underlook, and look at! Some of his own followers can, if they will, tell him where and when we have *not* overlooked this "text of Scripture which really has to do with the subject" to the utter annihilation of the globular hypothesis! Well, things are not always what they *seem*, and this is one of them, for Zetetics rejoice in the fact that such a passage exists. Even "Z.W.T."

will hardly suggest that it is possible to hang a tangible earth upon NOTHING. It is an ambiguous sentence as it stands in English, but just in the same way as when a person says "I did nothing," he means "he did not do anything"; so this passage properly rendered should be, "He doth not hang the earth upon anything." This then perfectly agrees with Young's version, and confirms the other portions of scripture as quoted under Section 8, viz., that it is *not* hanged upon anything, but built upon foundations, for it is both unscriptural and unreasonable to speak of hanging any material thing upon NOTHING.

In conclusion, while we are willing to exercise charity, yet we decline to allow the Word of God to be tangled and twisted to suit the mere speculations of modern science so-called; and while we believe, also, that this is not the gospel of the grace of God, yet it is part of the Word of God, and to be received by all who love God, whether received or rejected by men of science. And the more we observe how much of modern science (so-called) is based upon "theory and hypothesis"—*i.e.* a mere process of guessing, the more we shall receive the testimony of God (which is truth) rather than the doctrines of men.

"PROVE ALL THINGS, HOLD FAST TO THAT WHICH IS TRUE."

### THE DEATH AND BURIAL OF THE CIRCUM-NAVIGATION PROOF THAT THE EARTH IS A GLOBE!

"*Circumnavigation in an easterly and westerly direction does not prove the earth to be globular.*"

"The earth has been circumnavigated a great many times, and it is a common occurrence for a ship to leave England, and by steering westward all the voyage to arrive in England again without retracing an inch of her way. Similarly, we can journey round the globe, sometimes travelling on land, and sometimes on the sea, but eventually return to the starting point without at all turning back on our course. This would appear to be a certain proof that the earth's surface is curved, nevertheless it has been pointed out that circumnavigation would be possible if the earth had a flat surface, with the north magnetic pole at its centre. A compass needle would THEN *always point* to the centre of the surface, and so a ship might sail due east and west, as indicated by the compass, and eventually return to the same point by describing a circle." *Elementary Physiography*, Eighth Ed., by Professor Richard A. Gregory, F.R.A.S., etc

In the Preface of the book we read, "Owing to the rapid advances of science in recent years, text books, which formerly ranked first of their kind, have dropped out of date." The above extract doubtless explains the cause for this.—Ed.

## FAITH AND SCIENCE.

BY "BALAAM'S ASS."

"After the intoxication of the imagination comes its prostration and relapse."—CANON KINGSLEY'S "Hypatia."

Should not the men of every land,  
Who love the Truth and Right,  
Be leagued in one paternal band,  
Against all ill to fight?  
Creeds and opinions men may woo,  
But love of Truth and Right  
O'er all, whatever else may sue,  
Should all good men unite.

We have often been told that the question of the configuration of the earth is of no importance to Christianity or mankind in general. Indeed, the writer has been charged with "giving up communion with the Lord to quarrel with men about the earth's shape." Our object, therefore, in this article is to demonstrate that our well-meaning friends are utterly mistaken as to our Object, and entirely ignorant of the importance and connection of the subject with Holy Writ. Christian friend, will you tell me that your faith is based in the Word of God, *i.e.*, the Bible? and that that Book being the Spirit breathed, or in other words, the inspired Word of God, cannot lie? I know your answer is, Yes, with all my heart. I add my hearty Amen.

But, now, tell me, do you believe that the Rev. Professor Bonney, D.S.O., F.R.S., spoke the truth at the Church Congress held at Norwich, Oct. 1895, when in his paper, "Is scientific progress increasing the difficulties of belief in the Christian Creed" (President, the Bishop of Peterborough) he said:—

"I cannot deny that the increase of scientific knowledge has deprived parts of the earlier books of the Bible of the historical value which was generally attributed to them by our forefathers. The story of Creation in the book Genesis, unless we play fast and loose, either with words or with science, cannot be brought into harmony with what we have learnt from geology. Its ethnological statements are imperfect, if not sometimes inaccurate; the story of the Fall, of the Flood, and of the Tower of Babel, are incredible in their present form. These narratives are allegorical, not historical; they are spiritual, not scientific truths."—*Eastern Daily Press* (Supplement), Oct. 10th, 1895.

Such is the teaching emanating from the pulpits and platforms of this so called "enlightened age." The following is another specimen:—

"No student of science is able to believe that any such Flood as that recorded in the early chapters of Genesis ever took place in the history of

the human race. . . . The Flood story is a myth, not history."—The Rev. C. F. Aked at Pembroke Chapel, Liverpool. See *Christian World Pulpit*, June 14th, 1893, p. 371.

Now, most Christians think that Freethinkers are a blind and ignorant lot of bigots, but upon this subject, at anyrate, he is on a par with the Parson? The following extract will incontestably prove that this is so:—

"There is something in Christianity calculated to make it hostile to science. Its sacred books are defaced by a puerile cosmogony, and a vast number of physical absurdities: while its whole atmosphere, in the New as well as in the Old Testament, is in the highest degree unscientific.

"The Bible gives a false account of the origin of the world; a foolish account of the origin of man; a ridiculous account of the origin of languages. It tells us of a universal flood which never happened. And all these falsities are bound up with essential doctrines, such as the fall of man and the atonement of Christ; with important moral teachings and social regulations. It was therefore inevitable that the Church, deeming itself the divinely-appointed guardian of Revelation, should oppose such sciences as astronomy, geology, and birlogy, which could not add to the authority of the Scripture, but might very easily weaken it. Falsehood was in possession, and truth was an exile or a prisoner."—*The Freethinker*, Oct. 16th, 1892.

And what is the opinion of the public press (?) upon this matter? Here is an extract from one:—

"The most noteworthy feature of the British Association this year is that the assembled savants—representing religion, science, philosophy, and politics—have surrendered hands down to views which, if accepted by anyone ten years ago, would be sneered at as a mark of disgrace. The Church has had to give in because geology and biology have been too strong for the Book of Genesis, which is no longer to be accepted as a real account of the Creation, but merely a symbolical one. The incontestible experiments and experiences of the practical scientists have proved that Darwin was right, and that evolution is as certain a law as that of gravitation. What a number of the 'learned' books of a few years ago opposing evolution must now be ignominiously withdrawn from circulation? And how small must the controversial parson and the lay evangelist, who would prove to you in 'two jiffies that science was all bosh,' feel at the thunders of competent scholars!"—*Reynolds's Newspaper*, Oct. 13th, 1895.

Now, dear Christian reader, here we have a representation of professors of so-called science, the clergy, freethinkers, and editors of the public press, and everyone of them appear to be ignorant that to follow any man's conclusions, because he is considered a "competent scholar," is proof positive that they thereby become an acolyte to an *ignis fatuus*. As they all teach the same thing, have we not an irrefutable proof that the *so-called* sciences of modern theoretical astronomy, geology, and evolution are three unclean frogs, with which the Christian should have no connection whatever?

*(To be Continued.)*

### "THE FAITH" v. THE TRUTH.

*To the Editor of "The Faith."*

DEAR SIR,—I have read many articles in "The Faith" with great pleasure and profit, but that one on "Satan and Sorrow" in the current number of "The Faith" caused me surprise and disappointment. The writer speaks of "our sun" as though there were a plurality of suns, and of several worlds besides ours,—this one. Such language surely must be known to be quite foreign to the Holy Scriptures, not only being contrary, but also utterly antagonistic to the teachings of those Scriptures. *Both cannot be true*; and these are not the days for half beliefs or measures, one way or the other. The "Science," falsely so-called, which teaches and enforces this stultifying of Holy Scripture, is *modern*, and, what is still worse, *Infidel*, and you must admit was no part of "The Faith once for all delivered to the saints"; then why teach in *your* "Faith" this so-called science which is made the basis of attacks on the *Ancient* and only *True Faith*, by those who presumptuously pose as being *Educated* and capable of what they call Higher Criticising? *If* the planets are worlds, why not the stars also? Perhaps some of your readers *think* they are, but God, through His servant Moses, calls them all merely "lights!" Again, since the Bible speaks of only *one material World*, by what right do we add to the number? If we are allowed to play fast and loose with God's Word, where shall we stop? Why do you not speak as the Oracles speak? Is this possible unless we *think* as they do? It seems that much of the Article in question *is drawn from the writer's* (or other's) *imagination!* It is dangerous to be wise above that which is written, then why attempt to be so? I trust the greater part of your readers prefer True Wisdom to that of the World's, which God declares is "foolishness;" by all means keep to the "*Ancient Faith*," or in consistency alter the title of your periodical, as such a title,

covering such Anti-Biblical matter, is to say the least of it, very pernicious and likely to be most misleading to many. Trusting you will see this matter in its true light, and publish this letter in "The Faith," believe me to remain,

Yours faithfully,

H. H. S.

London, Feb. 5th, 1896.

P.S.—"The Puzzled Cleric" and "The Bible and New Science" enclosed.

DEAR FRIEND,—Yours to hand, but I am unable to use it, as the advocacy of the matter named forms no part of the testimony of the Magazine. Wishing you every blessing in the Lord, our Life, I remain,

Yours fraternally,

Feb. 5th, 1896.

CYRUS E. BROOKS.

To H. H. S.

*To the Editor of "The Faith."*

DEAR SIR,—Your post-card to hand. Of course, as Editor of what is called "The Faith," you are empowered to refuse, and, therefore, not insert, my letter, in which I contend for the accuracy of the Bible account and view of Creation, as against the *Modern-Astronomical* and *Infidel* view; but when you say the subject named "forms no part of the testimony of the magazine," I must demur and protest, for you have already inserted that particular article ("Satan and Sorrow") I wrote you upon, which supports the *Modern* view held by every disbeliever in the Word of God. Had you not first made the subject a matter of testimony (on the wrong side, too!) in your periodical, I should not have troubled you with my letter. I may add, I have heard from other Zetetic Life believers, that they, too, were surprised and disappointed by your printed testimony to this "Modern (Infidel-making) Astronomy," which is undoubtedly a "Science falsely so-called." Trusting you may yet be led to believe completely, and therefore acknowledge publicly, the ancient faith and record, believe me to remain,

Yours faithfully,

London, Feb. 11th, 1896.

H. H. S.

[As "the advocacy of the matter named" forms part of the testimony of this magazine, we print the above, trusting that the Editor of "The Faith" will avail himself of the opportunity of explaining himself in *these columns*. We regret to see that the slimy, sulphurous theory of Evolution is now being taught in "The Faith!" Perhaps the "advocacy of the matter named *does form part of the testimony* of the magazine?" If not, why is it there?—Ed.]



## ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does *not* hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o MR J. WILLIAMS,  
32, Bankside, LONDON, S. E.

ICONOCLAST.—Thanks for *The Latest Discoveries in Astronomy*, also *The Square World*. Rev. vii. 1. teaches that the *earth*—not the “world”—hath “four corners.” No man on that account should, or can logically assert that “it *must* be *square*, or it would never have four corners.” Hath not a Rectangle, Rhombus, Rhomboid, Trapezoid, and a Diamond each four corners? Draw them on paper and see.

The assertion that Jesus could, on his bason-earth theory, see “all the kingdoms of the world” is equally as false as it would be if he asserted that the globular theory were true. Is he conscious of that when he says, “One could, from *the centre*, see all the kingdoms of the world *at once*”? A person *might* or he *might not* be able to see all the kingdoms of the world from the centre. Certainly he could not see them all *at once* even were it square! What about those kingdoms situated behind him?

The fact is he has seized the plane earth facts, advanced, both by “Parallax” and the late John Hampden, to make his theory appear a feasible one! He has done the same with LADY BLOUNT’S *Nebular Hypothesis* (Earth Review, May, 1894, p. 157), and has not been honest enough to acknowledge the persons or the source of his information! Those who live on a “square world” should act on the square, but I suppose that while the round globe world can roll on in space, the square world requires *pushing*!

C. HARPUR.—Thanks for your “comments” they are always amusing, especially when you “cannot understand,” and plead “not guilty.” Our space is so very limited we must close the controversy between you and G. M.

The evidence for the Alleghanies having been seen from Teneriffe will be found in Tallis’s Literary Newspaper, June 11th, 1864.

We can quite understand why Professor G. H. Darwin, of Cambridge, “refused to allow his answer to be sent to us.” The Professors know and realize as no others do, the *power of the Truth* we wield against their suppositions. Glad to see you own that “Gravitation is a name and NOTHING MORE.” But would anyone save a fool attempt the idiotic feat of calling “nothing” a “law of Nature,” and attribute to it the intelligence found only in living creatures?

## EDITORIAL NOTICES.

Please to ask for “The Earth—not a Globe—Review,” at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec, post free, to any address in the postal union for 1s 6d per year, in advance.

All monies for the Society must be paid direct to the local Vice Secretaries, or direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Summer Street, S. E.

*Errata*.—In our last issue, p. 143, from “Cannock to Whiton,” read Cannock to Wolverhampton; from Whiton to Smethwick read Wolverhampton to Smethwick.

We have from time to time received many letters asking us to issue this journal every month. We have great pleasure in announcing that in future it will be issued Monthly at its present price and size, and therefore ask the help needed to do so. We gladly give time and labour free, but the printer must be paid, therefore we ask the co-operation of all Zetetics to assist us to increase its circulation and so help us in our testimony for God’s Truth as found in Nature and taught in His Word.

—THE—  
EARTH—NOT A GLOBE—REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No 2 (MONTHLY SERIES). MAY, 1896. PRICE 1D.

“UNIVERSAL GRAVITATION, A PURE  
ASSUMPTION.”

BY LEO CASTLE.

No. IV.

Dedicated to THE EDITOR of *Reynolds’s Newspaper*.

We have received the *Earth (not a globe) Review*, a 1d monthly publication, which may be obtained from John Williams 32 Bankside, London, S. E. It is melancholy to think that at this time of the day even a handful of people are wasting their energies upon an absurdity of this nature.—*Reynolds’s Newspaper*, April 5th, 1896.

Is this all the otherwise outspoken Editor of *Reynolds’s Newspaper* can say? It appears so! But what does he mean by “an absurdity?” Does he mean the globular theory? If so we most heartily join him in his righteous denunciation, but if he means the teaching that the earth is *not* a globe, then we challenge him to prove his assertion. Seeing that he owns to being in a melancholy state, we trust this challenge will prove an effectual antidote.

11th—*Continued*. “In ascending a hill we experience a hard struggle, and feel more fatigued than when walking on level ground. Why is this? The Newtonian attributes this result to the attraction of gravitation of the earth, against the *pull* of which we have to contend; but if he would be consistent with his theory that the ‘attraction of gravitation *diminishes* inversely as the square of the distance from the centre of the earth,’ we ought, in defiance of experience, to feel it to be less laborious to ascend a hill than to promenade the same distance on level ground, because as we ascend we *recede from* the centre of the earth; therefore the force (pull) of gravitation ought to diminish in a corresponding degree. The Newtonian can only get over this difficulty

## ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does *not* hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o MR J. WILLIAMS,  
32, Bankside, LONDON, S. E.

ICONOCLAST.—Thanks for *The Latest Discoveries in Astronomy*, also *The Square World*. Rev. vii. 1. teaches that the *earth*—not the “world”—hath “four corners.” No man on that account should, or can logically assert that “it *must* be *square*, or it would never have four corners.” Hath not a Rectangle, Rhombus, Rhomboid, Trapezoid, and a Diamond each four corners? Draw them on paper and see.

The assertion that Jesus could, on his bason-earth theory, see “all the kingdoms of the world” is equally as false as it would be if he asserted that the globular theory were true. Is he conscious of that when he says, “One could, from *the centre*, see all the kingdoms of the world *at once*”? A person *might* or he *might not* be able to see all the kingdoms of the world from the centre. Certainly he could not see them all *at once* even were it square! What about those kingdoms situated behind him?

The fact is he has seized the plane earth facts, advanced, both by “Parallax” and the late John Hampden, to make his theory appear a feasible one! He has done the same with LADY BLOUNT’S *Nebular Hypothesis* (Earth Review, May, 1894, p. 157), and has not been honest enough to acknowledge the persons or the source of his information! Those who live on a “square world” should act on the square, but I suppose that while the round globe world can roll on in space, the square world requires *pushing*!

C. HARPUR.—Thanks for your “comments” they are always amusing, especially when you “cannot understand,” and plead “not guilty.” Our space is so very limited we must close the controversy between you and G. M.

The evidence for the Alleghanies having been seen from Teneriffe will be found in Tallis’s Literary Newspaper, June 11th, 1864.

We can quite understand why Professor G. H. Darwin, of Cambridge, “refused to allow his answer to be sent to us.” The Professors know and realize as no others do, the *power of the Truth* we wield against their suppositions. Glad to see you own that “Gravitation is a name and NOTHING MORE.” But would anyone save a fool attempt the idiotic feat of calling “nothing” a “law of Nature,” and attribute to it the intelligence found only in living creatures?

## EDITORIAL NOTICES.

Please to ask for “The Earth—not a Globe—Review,” at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec, post free, to any address in the postal union for 1s 6d per year, in advance.

All monies for the Society must be paid direct to the local Vice Secretaries, or direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Summer Street, S. E.

*Errata*.—In our last issue, p. 143, from “Cannock to Whiton,” read Cannock to Wolverhampton; from Whiton to Smethwick read Wolverhampton to Smethwick.

We have from time to time received many letters asking us to issue this journal every month. We have great pleasure in announcing that in future it will be issued Monthly at its present price and size, and therefore ask the help needed to do so. We gladly give time and labour free, but the printer must be paid, therefore we ask the co-operation of all Zetetics to assist us to increase its circulation and so help us in our testimony for God’s Truth as found in Nature and taught in His Word.

—THE—  
EARTH—NOT A GLOBE—REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No 2 (MONTHLY SERIES). MAY, 1896. PRICE 1D.

“UNIVERSAL GRAVITATION, A PURE  
ASSUMPTION.”

BY LEO CASTLE.

No. IV.

Dedicated to THE EDITOR of *Reynolds’s Newspaper*.

We have received the *Earth (not a globe) Review*, a 1d monthly publication, which may be obtained from John Williams 32 Bankside, London, S. E. It is melancholy to think that at this time of the day even a handful of people are wasting their energies upon an absurdity of this nature.—*Reynolds’s Newspaper*, April 5th, 1896.

Is this all the otherwise outspoken Editor of *Reynolds’s Newspaper* can say? It appears so! But what does he mean by “an absurdity?” Does he mean the globular theory? If so we most heartily join him in his righteous denunciation, but if he means the teaching that the earth is *not* a globe, then we challenge him to prove his assertion. Seeing that he owns to being in a melancholy state, we trust this challenge will prove an effectual antidote.

11th—*Continued*. “In ascending a hill we experience a hard struggle, and feel more fatigued than when walking on level ground. Why is this? The Newtonian attributes this result to the attraction of gravitation of the earth, against the *pull* of which we have to contend; but if he would be consistent with his theory that the ‘attraction of gravitation *diminishes* inversely as the square of the distance from the centre of the earth,’ we ought, in defiance of experience, to feel it to be less laborious to ascend a hill than to promenade the same distance on level ground, because as we ascend we *recede from* the centre of the earth; therefore the force (pull) of gravitation ought to diminish in a corresponding degree. The Newtonian can only get over this difficulty

by a species of scientific quibbling. According to the definition of weight I have given, the solution of the problem is perfectly simple. In ascending a hill a man comes in conflict with the law that the natural tendency of any body is to seek the easiest and shortest route to its level of stability. He chooses the very reverse, and must therefore endure the consequences of acting in opposition to this law. At every step he has to lift his *own weight*, and the higher he mounts the more he feels the influence of the law which he defies. His easiest and more direct course to obey the law of weight is to remain where he is; the next is to descend to a lower level.

The attraction of gravitation is said to be stronger at the surface of the earth than at a distance from it. Is it so? If I spring upwards perpendicularly I cannot with all my might ascend more than four feet from the ground; but if I jump in a curve with a low trajectory, keeping my highest elevation about three feet, I might clear at a bound a space above the earth of about eighteen feet; so that *practically* I can overcome the so-called force (pull) at the distance of four feet, in the proportion of 18 to 4, being the *very reverse* of what I ought to be able to do according to the Newtonian hypothesis.

Again, take the case of a shot propelled from a cannon. By the force of the explosion and the influence of the reputed action of gravitation, the shot forms a parabolic curve, and finally falls to the earth. Here we may ask, why—if the forces are the same, viz., direct impulse and gravitation—does not the shot form an orbit like that of a planet, and revolve round the earth (globe)? The Newtonian may reply, because the impulse which propelled the shot is *temporary*; and the impulse which propelled the planet is *permanent*. Precisely so: but *why* is the impulse *permanent* in the case of the planet revolving round the sun? What is *the cause* of this permanence?

We are asked by the Newtonian to believe that the action of gravitation, which we can easily overcome by the slightest exercise of volition in raising a hand or a foot, is so overwhelmingly violent when we lose our balance and fall a distance of a few feet, that this force, which is imperceptible under usual conditions, may, under extraordinary circumstances, cause the fracture of every limb we possess? Common-sense must reject this interpretation. Gravitation does not furnish a satisfactory explanation of the phenomena here described, whereas the definition of weight already given does, for a body seeking in the readiest manner its level of stability would produce precisely the results experienced. If the influence which kept us securely attached to this earth were identical with that which is powerful enough to disturb a

distant planet in its orbit, we should be more immediately conscious of its masterful presence and potency; whereas this influence is so impotent in the very spot where it is *supposed* to be most dominant that we find an insurmountable difficulty in accepting the idea of its existence. Fortunately for our faculty of locomotion, the Newtonian hypothesis may be rejected as a snare and a delusion.

It is quite amusing to watch Newtonians and Darwinians floundering about in their attempts to expound the mysteries of creation. Their theories are as ridiculous as the fashion which once prevailed for Della-Cruscan poetry, and they ought to be treated with equal severity.

It seems quite possible that during the last two hundred years we have been living in a sort of scientific fool's paradise, and that universal gravitation is a gigantic Newtonian mare's nest.

As a theoretical scientific guide we must give up Sir Isaac Newton as useless and misleading, and allow his reputation to retire into private life. (Hear, hear.—Ed. *E.R.*)

In *Knowledge* of the 17th and 24th Feb., 1882, there appeared a discourse on *The Birth of the Moon by Tidal Evolution*, by Dr. Ball, the Astronomer Royal for Ireland, which I should say is *without exception*, the most delusive and absurd contribution ever made to so-called science. At one time I thought that "Parallax," who told us that the earth was a flat plane like a plate, was the most misguided man in the kingdom but I now believe that he is quite entitled to take rank in scientific wisdom, and to sit down on an equality with the Astronomer Royal of Dublin."

*The New Principia*, by NEWTON CROSSLAND.

(To be Continued.)

---

#### WHICH PROFESSOR SPEAKS THE TRUTH?

"Mr Norman Lockyer has been telling an interviewer that Mars is like us in many respects. IT HAS AN ATMOSPHERE LIKE OURS."—*Christian Million*. San Jose, Aug. 9th, 1894.

"Professor Campbell, of the Lick Observatory, announces that he HAS DEMONSTRATED that Mars presents NO EVIDENCE OF HAVING AN ATMOSPHERE."—*The Standard* Aug. 18th, 1894.

#### A SCIENTIST SPEAKS THE TRUTH.

"The interesting chapter on solar theories is well fitted to serve as a lesson in *Modersty*, so *diverse and conflicting* are the various hypotheses, so *difficult to harmonize* are the observed facts."—*Knowledge*. Feb. 1895 (p. 35.)

## FAITH AND SCIENCE.

By "BALAAN'S ASS."

No. II.

The subject we intend to contend for in these columns has been advocated for many years past. It is increasing in interest and securing more and more earnest attention every day. That subject is the cosmogony of Holy Writ and Nature. Also, we intend to show the utter falsity and unscientific character of the theories of modern astronomy, geology, and evolution; and that they are one and all, not only anti-scriptural, but irrational and unphilosophical. We challenge the ablest scientists of the day to defend their *suppositions*, and their theories built thereon, or to find a single flaw in the Divine Cosmogony of Holy Writ.

We saw in our last issue that the teaching of science so-called tends to infidelity, and in essence is the same teaching.

Let us now look at what is termed dissent, and contrast it with another form of infidelity called Agnosticism.

First then, in a theological magazine called "*The Faith*" (March, 1896), we find the following:—

"It may be well to dwell somewhat upon the Divine purpose referred to in the Scriptures."

This is an excellent starting point, but, as we soon shall see science (so-called) teaching soon mars it as dead flies do ointment.

"A purpose carries along with it the thought of design (true), which again involves a series of processes."

We reply, not *necessarily* so. The "Divine purpose referred to in the Scriptures" knows no "series of processes," but distinctly and absolutely teaches creation to have been instantaneous. The point that divides error from truth is an exceedingly fine one, and this assertion about a "series of processes," is the first step from the Scriptures of Truth on the road of error and falsehood. Not that the writer *meant* or *intended* to teach error and falsehood. I do not impute *intentions*, but words have *their own meaning*, and when we use them we should be exceedingly careful what we say. The writer continues:—

"And there have been in the distant epochs of the past, and still are being worked out through the principle of evolution, a gradual development through natural selection, generic life being unfolded by successive acts of creation in a successively *ascending order*. . . . All these evolutionary eras, these secular periods of time, are co related to, and correspondent with the evolution of all organic types, including *pre adamite man*."

DOES THE TEACHING OF EVOLUTION MAKE GOD A LIAR?

*First.* If these extracts are true, as referring to "the Divine purpose *taught in Scripture*," will the writer of the article state where such is taught that we may read about it for ourselves? *Secondly.* We respectfully request him to tell us *where* and *when he saw*, or *where* and *when we can see* any "gradual development through natural selection," or "series of processes," which are "STILL BEING WORKED OUT through the principle of evolution?" When he has done this, we shall also require to know *when* and *where* Involution, the absolute essential and fundamental prerequisite of evolution, took place?

*Thirdly.* God, the Creator, in His Word declares that "THE FIRST MAN ADAM was made a living soul." 1 Cor. xv. 45. Now as Adam *was* "THE FIRST MAN," and we are his descendants AFTER he had sinned, where, according to the "Divine purpose referred to in Scripture," is there any room for a "pre-Adamic man," or, "pre-Adamite ages?" If it be possible to have a monkey before a man (and it *is* according to the "Divine purpose in Scripture." Gen. i. 24-25), surely it is not possible to have a man before "*the first man*?" If the divinely inspired statements in the Epistle to the Corinthians are not absolutely historical and literally true then Genesis is not true, consequently the resurrection of Christ is not true, and therefore our resurrection unto eternal life is not true either, and by consequence it is perfectly immaterial whether man has an "immortal soul" or no! Burn the Bible as a parcel of lies, our science of evolution has taught us that man was not created in the image and likeness of God and pronounced very good, i.e., the *acme* of perfection according to the Divine Mind and Purpose, than which there is no greater—but we were evolved from—slime—a jelly fish!

The writer says he "*can* illustrate upon unimpeachable evidence that God has from the Beginning"—which Beginning? the Adamic, or the Pre-Adamic one?—"been working up from primal germs and simple types to modern developments and expansions." Well, what about ancient developments? Are they all played out that the "modern" ones may be the "survival of the fittest?" Now we must be honest and say that we do not for a moment doubt the writer's ability to "*illustrate*" the matter, but we do certainly doubt his ability to *prove* what he says! To *prove* a thing is one thing, but to *illustrate* it is quite another. We trust he knows the difference.

And now, dear christian reader, please compare the extracts given from *The Faith* with the following from the Agnostic Journal, Jan. 5th, 1889, and tell us are they not *the same* in fact and principle?

"The account of creation in Genesis is obviously inconsistent with the real facts, both as regards the relations of the earth to the sun, moon, and stars; the crystal vault separating the waters; the manner and order of succession of vegetable and animal life, and numerous other points. It can be defended only on the plea that the inspired Revelation was not intended to teach ordinary facts, such as those of astronomy and geology, but only the religious facts of the existence of God and of man's relation to Him. Taken in this sense, we may consider it as a poetical and sublime version of the older Chaldean cosmogony, which it closely resembles, revised in a Monotheistic sense, and writing "God" for "Gods," and as an interesting record of the ideas floating in the East at an early period."

"The account of a universal deluge and the destruction of all life, except that of a few pairs of animals preserved and living together for a year in an ark of limited dimensions, from which the earth was re-peopled, involves not only physical impossibilities, but is directly opposed to the most certain conclusions of geological and zoological science."

"The origin of man is, however, the point upon which the radical opposition of the Orthodox and Scientific creeds comes out most sharply. It cannot be true both that man has *fallen* and that he has *risen*; that he was miraculously created, quite recently in the world's history, in God's own image, and in a state of high moral perfection, from which he fell by an act of disobedience, introducing sin and death into the world; and, on the other hand, that he has been *evolved*, during an immense period of time, from semi-animal palæolithic ancestors, ruder than the rudest savages. The evidence of perhaps 1,000,000 of human implements, found in strata of great geological antiquity in all quarters of the globe, proves to demonstration that man's cause has been upwards, and not downwards, and that the true history of the human race has been the direct contrary of that given by the Bible."

"Whether man, like other mammals, was evolved through millions of years from primitive forms may be as yet uncertain, though every fresh discovery points that way. But this much is absolutely certain: that he existed on earth at the least 50,000, and more probably 200,000 or 300,000 years ago, in a state lower than that of the lowest savages, but already spread over the four continents, and therefore far from his first origin; ignorant of all arts except fire and the rude chipping of stones; and that, as ages rolled on, his progress may be traced, step by step, from rude to finer chipping; to the hafted celt, the arrow, and javelin; the barbed harpoon, the eyed needle, the art of drawing, and

finally to polished stone, pottery, bronze, iron, and the other arts of civilisation as we find them in full force at the dawn of history 6,000 years ago in Egypt and Chaldea."

"Read Lyell's "Antiquity of Man," Geikie's "Pre-historic Europe," or almost any recent work on the subject, and then go to the British Museum and look at the collection of stone and other human implements, and you will see the answer to the question which perplexes you, why Modern Science and Evolution should be considered as hostile to Genesis and orthodox geology. How can these facts be reconciled with the Biblical theory of Adam's creation and fall, with its logical consequence of the Atonement and Redemption?"

There was an ape in the days that were earlier:  
Centuries passed, and his hair became curlier;  
Centuries more gave a thumb to his wrist,  
THEN, he was a man, an Evolutionist.

*(To be Continued.)*

## FIGURATIVE AND ALLEGORICAL VERSES.

BY LADY BLOUNT.

*From her Serious Operetta, entitled "Astrea," or "The Witness of Stars."*

[Portraying converse betwixt two evil spirits, who are visiting Earth, to appear at a *séance* in the early centuries: A.D.]

*Prince*—Describe thy plans, detail each stage,  
For snaring man in Christian age.

*The Spirit Jester*—First wide and far shall rise division,  
To fog men's senses, cause derision.  
Then strong conceit shall fast increase,  
A trap that seldom gives release;  
This spirit holding Christians—neat,  
Will raise a sect in every street.

*Prince*—Ah! yes I see (fine policy!)  
And through Time's telescope  
In the 17th century a germ—  
A rare "blue stocking," and real "book worm,"  
Alas! half crushed, and by a Pope!  
Still lives the learned blossom-sear

In wisdom "worldly"—not too clear—  
 To satisfy the \*fool's demands,  
 And nullify God's Word, commands!  
 Against their Maker men shall turn,  
 And strong "Delusion" Truth shall spurn  
 For this well focussed, and compact,  
 Impresses *lies* as *solid fact!*  
 Spirits prepared throughout the ages,  
 Shall do our will at fitting stages:  
 Man's word 'gainst God's, shall be accepted,  
 And *false cosmogony* erected.  
 That earth's a tiny whirling globe,  
 Shall men set forth in righteous robe!  
 Above concern that Moses erred,  
 Tho' Jesus verified his word,  
 Denying Earth's Creator!

*Jester*—Stay, Prince! Observe, before Time's clos'd,  
 Our giant will shall be opposed.  
 Sneer not at the Zetetic band,  
 Goliath fell by David's hand!  
 I see a stone! it taketh aim (The *E.R.*)!  
 Adds to its numbers, swells the train.

(Truth seekers are but deemed fanatics—  
 For at "the Truth" the masses laugh!  
 Three fourths of these are idiots (per Carlyle's statics),  
 And truly fools will bluster, shout and chaff.)

*Prince*—Why, Jester laughing still as ever?

*Jester*—I'm mimicking mankind so clever!

*Prince*—I hate them for their power of will  
 To change their minds, or hold them still.

*Jester*—"Power of will—as well to lose it—as not to use it!

*Grand Chorus*—Hear how they shout! with addled brain,  
 It's nought to me if Earth's a plane—  
 Or "whirling globe"—it's all the same—  
 So long as I my grub can get,  
 Fol-lol-de-riddle-diddle-digo.

June, '94.

Written for the *Earth Review*.

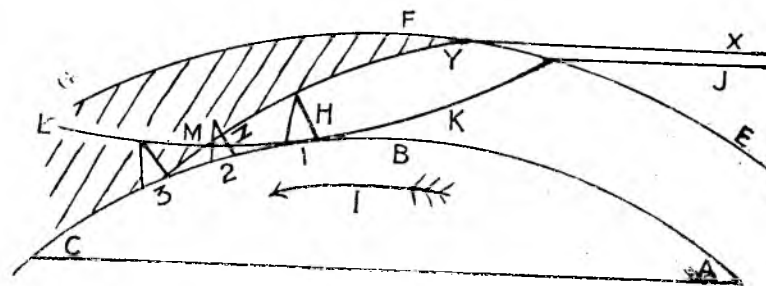
\* "The fool hath said there is no God."

## ZETETIC REFRACTION.

By JAMES NAYLOR.

No. IV.

Of all the ordinary phenomena of nature there are few more beautiful than that of the rising sun first tipping with light the hill-tops, and then gradually descending to the valley beneath. The only approach to this beauty is the corresponding phenomena of the light of the setting sun as it first quits the valley, and then slowly rises up the hill sides, and finally leaves the tops bathed in twilight. Now, both these phenomena, namely, the manner in which the sun appears and disappears, and the phenomena of the twilight, are entirely inexplicable by the current teaching about the refraction of light. To prove this let us turn to the following diagram:



where we will suppose the arc ABC to represent a portion of the supposed globular earth, and the line EFG the upper limits of the atmosphere; let the line XYZ be an imaginary ray of light coming from the sun and refracted towards the perpendicular in accordance with the current teaching. Now, it is evident that this ray is the last one by which the slowly setting sun will be rendered visible to the spectator upon the earth. Evidently all the rays beyond the limits of the atmosphere would be lost in space and would not reach the earth at all, whilst all the rays which reach the earth before XYZ need not be taken into consideration. All these parts of the atmosphere, then, which are beyond this ray as seen from the earth, would evidently be devoid of light in a manner indicated by the shaded parts of our diagram. It is also further evident that as the earth made its supposed motion from west to east (indicated by the arrow I) the hill H would first have the sun at its summit and lastly at its base in a manner the very reverse of what we see in nature. The figures 1 2 3 will make this argument quite clear, for we will suppose



these figures to represent successive positions assumed by the hill as a consequence of the supposed motion of the earth. In position 1 the sunlight is just about to quit the hill-top, in position 2 it is half-way down the side, whilst in the third and last position the valley is finally left to the evening's gloom. It will also be further noted that long before position 1 is reached the upper regions of the atmosphere are devoid of light, making the phenomena of twilight as seen in nature absolutely impossible. In nature we know these upper regions are illuminated with sunlight long after the sun has set to the earth below. If, however, the ordinary teaching of refraction be true the very reverse of this would be the case, for, as our diagram conclusively shows the upper atmosphere would be in gloom and darkness, whilst the earth was still flooded with solar rays. This position, however, is of course absurd, and, therefore, in contrast with it, let us now see the effect of a ray of light refracted towards the horizontal in the manner for which we have been contending. This ray we indicate by the line J K L, and an examination of it shows at once that the phenomena of the appearance and disappearance of the sun, and of twilight as we see them in nature, could and would actually ensue. Take the former phenomena for instance, where in position 1 of the hill H the sun is seen just setting to the valley, while the whole hill side is still illuminated. In position 2 the disappearing sunlight has reached half way up the hill side, whilst in position 3 the sun has finally set even to the top of the hill. But though from the top the sun is now no longer visible the upper regions of the atmosphere are still illuminated, and would produce that beautiful twilight for which all northern latitudes are famous. All the shaded part of our diagram, in fact between F Y and L M, would now be suffused with light. It is thus clear that the Zetetic mode of refraction thoroughly accounts for the phenomena of the setting sun, and of twilight. Finally to see that our reasoning also applies to the morning twilight and the rising sun, we have only to suppose the earth moving in the opposite direction to that indicated by the arrow I, and we shall at once note that by refraction, as we have Zetetically shown it, both the phenomena of the rising sun and the morning twilight are perfectly explicable, whilst by refraction as ordinarily taught they are absolutely impossible.

From what has been now demonstrated in these papers it is clear that Newtonian astronomers, and all other upholders of current teaching about refraction, are placed in a most serious dilemma. To account for the sun setting later than according to theory it should do, refraction (?) is assumed to tend towards the vertical. But to assume this mode of refraction is absolutely fatal to any satisfactory explanation of the

rising or setting sun, or of twilight. On the other hand, if to account for these last named phenomena refraction is assumed to tend towards the horizontal, then that assumption is clearly fatal to the previously named explanation of why the sun is seen longer than theory permits. On the horns of this very interesting dilemma we may therefore safely leave Newtonian astronomers to reflect and repent at their leisure.

In conclusion it only remains to summarise, the results of Zetetic refraction and state them in formal language, so that their *simplicity* and *accuracy* may be contrasted with the *loose* and *empirical* expressions of current teaching.

#### LAWS OF REFRACTION.

1st.—A ray of light is a force, and, agreeably with the law of forces moves along a path which presents the least resistance.

2nd.—When the resistance is *equal* against each side of the ray the path described is a *straight* one.

3rd.—When the resistance against each side of the ray is *unequal* the path described is *concave* upon the side which meets with the greatest resistance.

Contrast with these three simple rules (which will be found to explain all the phenomena of refraction) the following unsatisfactory statements of current teaching.—“When light passes out of a rarer into a denser medium it is drawn to the perpendicular. . . . But when a ray passes from a denser into a rarer it moves in a direction further from the perpendicular.” In these statements, which are taken from that popular book, “Joyce’s Scientific Dialogues,” page 219, there is no attempt to give a reason why a ray of light behaves in the manner stated. Bare assertions only are made, which, if one cares to investigate them, will be found to not even cover the whole case, to say nothing of the fact that they are entirely erroneous, or at any rate only partially true as we have in these papers conclusively proved. If, therefore, we have succeeded in exposing the errors of current teaching upon refraction and prevented for the future their being used in bolstering up popular astronomical theories, our labours have certainly not been in vain.

#### ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,

c/o MR J. WILLIAMS,

32, Bankside, LONDON, S.E.

## CONTENTS OF OUR LETTER BOX

Dear Sir,—'Tis said, "discretion is the better part of valour," evidently so thinks the most courageous editor of any English newspaper. I alluded to *Reynolds's* on many previous occasions, but particularly on January 1st, 1896. A copy of our *Review* was submitted to that gentleman for review, Zetetics naturally thinking he would show fight of some sort, as part of a powerful opposition article on the "Myth of Astronomical Gravitation" dedicated to him, was included in this particular number: we were however disappointed in the prowess of this Goliath; the pluck usually shown on most subjects had evidently oozed away when confronted with ours. The only visible effect produced was this modest notice. — "We have also received the *Earth-not a Globe-Review*, which is a journal of the Zetetic Society edited by Leo Castle price 2d; published at 32 Bankside London," which amounts to us being as usual, left complete masters of the field of journalism on our Grand Fact.

Our chicken hearted opponents cannot accuse us of cowardice; the difficulty has always been and still exists, in getting *so-called educated people* and *learned Societies?* to even attempt to face our batteries. The truth of the matter is, our opponents powder is no good. Their guns (those we have not turned against themselves) are all spiked and their imposing fortifications, on examination, turn out to be nothing more than pasteboard, held together with sophistical assertions and assumptions—what fabrics!!

Is there any wonder they cannot stand our fire? the wonder would be if they could!

Yours etc.,

ICONOCLAST.

Dear Sir,—I am glad to see the *Review* still maintains its character and is pushing its way on against all adverse criticism which

is brought to bear against our bulwark of Geographical truth. What do you think about Nansen reaching the "North Pole?" I think it very doubtful. He may have advanced nearer to the northern centre than any other explorer, but its questionable as to his reaching the "Pole." However, I hope he has; so that the fallacy of the belief in an actual North and South Pole may the sooner be exposed. Where alas will they find them?

J. LACK

Echo answers where? Text Books tell us that the North and South Geographical Poles are the extremities of the IMAGINARY LINE, passing through the centre of the globe. The idea of a sane man attempting to reach that which does not exist! People are beginning to see that the teaching of so called Astronomy and Geography is nothing but the outcome of supposition and not demonstrated facts as they have falsely been led to believe they were. See the following:—

## THE NORTH POLE AT LAST.

We are electrified by the statement in the daily press that Dr Nansen has informed his agent, a Siberian trader named Koucnareff, who has informed the Prefect of Kolymsk, who has likewise promptly informed the public that Dr. Nansen has reached the North Pole. We suppose he has merely hung up his hat on the apex of that geographical point for we learn from the same source that he is now on his way back, in spite of having found land. —*Invention*, February 22nd, 1896. No. 875, p 117.

Dear Sir,—Your continuation of gravitation is admirable. Surely all lovers of truth must feel satisfied and pleased with the style of the treatment of the subject. It has been favourably commented upon here by several, and enthusiastically applauded by others.

J. ATKINSON.

—THE—  
EARTH-NOT A GLOBE-REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No. 3 (MONTHLY SERIES). JUNE, 1896. PRICE 1D.

"UNIVERSAL GRAVITATION, A PURE  
ASSUMPTION."

BY LEO CASTLE.

No. IV.

"Zetetics seem to have a kind of idea that we set up gravitation as a substitute for God. This is a mistake." So writes C Harpur, from the Oriental Bank, Old Broad Street, London.

We are always ready to confess our "mistakes," and, therefore, take this opportunity of doing so by quoting from *an authority* on modern theoretical astronomy.

"While, however, THE IDEA OF 'GOVERNMENT' BY A GOD IS NOW EXCLUDED BY GENERAL CONSENT FROM THE DOMAIN OF SCIENCE, the *notion* of 'GOVERNMENT' BY "LAW" HAS TAKEN ITS PLACE, not only in popular thought, but in the minds of many who claim the right to lead it; and it is the validity of this *notion* which I have now to call in question . . . . . PHILOSOPHY FINDING NO GOD IN NATURE, NOR SEEING THE WANT OF ANY. The advanced Philosophy of the present time goes still further; asserting that as the progress of Science now places it beyond doubt that all the phenomena of nature—physical biological and mental—are but manifestations of certain fundamental 'properties of matter,' acting in accordance with fixed Laws, THERE IS NO ROOM FOR A GOD IN NATURE, and Scientific thinkers (you Mr. Harpur claim to be one of them, I presume?) who do *not* accept this as the conclusion obviously deducible from their recognition of the universality of the 'Reign of Law,' are branded as either illogical thinkers, or as cowardly adherents of a bygone superstition—men who are either deficient in the power to reason out the conclusions to which their own premises necessarily lead, or have not the courage to face them

## CONTENTS OF OUR LETTER BOX

Dear Sir,—'Tis said, "discretion is the better part of valour," evidently so thinks the most courageous editor of any English newspaper. I alluded to *Reynolds's* on many previous occasions, but particularly on January 1st, 1896. A copy of our *Review* was submitted to that gentleman for review, Zetetics naturally thinking he would show fight of some sort, as part of a powerful opposition article on the "Myth of Astronomical Gravitation" dedicated to him, was included in this particular number: we were however disappointed in the prowess of this Goliath; the pluck usually shown on most subjects had evidently oozed away when confronted with ours. The only visible effect produced was this modest notice. — "We have also received the *Earth-not a Globe-Review*, which is a journal of the Zetetic Society edited by Leo Castle price 2d: published at 32 Bankside London," which amounts to us being as usual, left complete masters of the field of journalism on our Grand Fact.

Our chicken hearted opponents cannot accuse us of cowardice; the difficulty has always been and still exists, in getting *so-called educated people and learned Societies?* to even attempt to face our batteries. The truth of the matter is, our opponents powder is no good. Their guns (those we have not turned against themselves) are all spiked and their imposing fortifications, on examination, turn out to be nothing more than pasteboard, held together with sophistical assertions and assumptions—what fabrics!!

Is there any wonder they cannot stand our fire? the wonder would be if they could!

Yours etc.,

ICONOCLAST.

Dear Sir,—I am glad to see the *Review* still maintains its character and is pushing its way on against all adverse criticism which

is brought to bear against our bulwark of Geographical truth. What do you think about Nansen reaching the "North Pole?" I think it very doubtful. He may have advanced nearer to the northern centre than any other explorer, but its questionable as to his reaching the "Pole." However, I hope he has; so that the fallacy of the belief in an actual North and South Pole may the sooner be exposed. Where alas will they find them?

J. LACK

Echo answers where? Text Books tell us that the North and South Geographical Poles are the extremities of the IMAGINARY LINE, passing through the centre of the globe. The idea of a sane man attempting to reach that which does not exist! People are beginning to see that the teaching of so called Astronomy and Geography is nothing but the outcome of supposition and not demonstrated facts as they have falsely been led to believe they were. See the following:—

## THE NORTH POLE AT LAST.

We are electrified by the statement in the daily press that Dr Nansen has informed his agent, a Siberian trader named Koucnareff, who has informed the Prefect of Kolymsk, who has likewise promptly informed the public that Dr. Nansen has reached the North Pole. We suppose he has merely hung up his hat on the apex of that geographical point for we learn from the same source that he is now on his way back, in spite of having found land. —*Invention*, February 22nd, 1896. No. 875, p 117.

Dear Sir,—Your continuation of gravitation is admirable. Surely all lovers of truth must feel satisfied and pleased with the style of the treatment of the subject. It has been favourably commented upon here by several, and enthusiastically applauded by others.

J. ATKINSON.

—THE—  
EARTH-NOT A GLOBE-REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No. 3 (MONTHLY SERIES). JUNE, 1896. PRICE 1D.

"UNIVERSAL GRAVITATION, A PURE  
ASSUMPTION."

BY LEO CASTLE.

No. IV.

"Zetetics seem to have a kind of idea that we set up gravitation as a substitute for God. This is a mistake." So writes C Harpur, from the Oriental Bank, Old Broad Street, London.

We are always ready to confess our "mistakes," and, therefore, take this opportunity of doing so by quoting from *an authority* on modern theoretical astronomy.

"While, however, THE IDEA OF 'GOVERNMENT' BY A GOD IS NOW EXCLUDED BY GENERAL CONSENT FROM THE DOMAIN OF SCIENCE, the *notion* of 'GOVERNMENT' BY "LAW" HAS TAKEN ITS PLACE, not only in popular thought, but in the minds of many who claim the right to lead it; and it is the validity of this *notion* which I have now to call in question . . . . . PHILOSOPHY FINDING NO GOD IN NATURE, NOR SEEING THE WANT OF ANY. The advanced Philosophy of the present time goes still further; asserting that as the progress of Science now places it beyond doubt that all the phenomena of nature—physical biological and mental—are but manifestations of certain fundamental 'properties of matter,' acting in accordance with fixed Laws, THERE IS NO ROOM FOR A GOD IN NATURE, and Scientific thinkers (you Mr. Harpur claim to be one of them, I presume?) who do *not* accept this as the conclusion obviously deducible from their recognition of the universality of the 'Reign of Law,' are branded as either illogical thinkers, or as cowardly adherents of a bygone superstition—men who are either deficient in the power to reason out the conclusions to which their own premises necessarily lead, or have not the courage to face them

There can be no question of the influence that is being exerted by the reiteration of these assertions on the intelligent thought of the younger generation.—Professor W. B. Carpenter, C.B., F.R.S., *The Modern Review*, October, 1880, p. 748-52.

Mr. Harpur, continues:—"You will own that the multiplication table is words, and nothing more. But would anyone save a fool attempt the idiotic feat of calling words laws of nature?"

No, we do *not* own that the multiplication table is words *and* NOTHING MORE. The multiplication table is a consecutive, ascending series of absolute numerical facts or fixed quantities. *Scil.* Twice two *are* four, *neither more nor less.* Four and four *are* eight, *neither more nor less.*

But when Cambridge or Oxford graduated gentlemen tell us that "the doubles of equals are equal," which being interpreted means  $4 = 2$  and  $8 = 4$ , we are inclined to believe that such "education" tends to make a nation, a nation of fools and infidels. Suppose Professor R. S. Ball presented your bank with a cheque for £400. Would you pay him upon that principle? Would your bank manager admit such a transaction to be a fact or a fraud?

(To be Continued.)

## HOW TO SEE SPHERICAL FLATNESS!

Mr. C. R. Illingworth, M.D., D.P.H. (London), writes:—"A fact I have noticed with regard to the sea-horizon proves incontestably the sphericity of the earth's form. Draw a line, or hold a string or a stick against the horizon at two points, and it is seen that the intervening horizon-line is an arc of a circle. The same will hold good in the case of land-horizon, provided there is SUFFICIENT FLATNESS, as in the case of a country like Holland.

But is there anyone who is not content with the existing proofs?"\*  
—*Pearson's Weekly*, August 3rd, 1895.

"The effects of perspective alone are sufficient to compel the removal of the time-honoured mistake of the hull-down 'proof' of the sphericity of the earth; at least one would hope so; but yet blunders are cherished, defended, and repeated in every department of learning."  
—ENQUIRER.—*The Future*, July, 1892.

\* The last issue of our Journal shows that the "existing proofs" of earth curvature are fast "passing away." The idea of an M.D. requiring "SUFFICIENT FLATNESS" to prove the existence of "an arc of a circle" is, to say the least, very amusing. Both these gentlemen believe the earth to be a globe. Strange, is it not?—Ed. *E.R.*

## FAITH AND SCIENCE.

By "BALAAM'S ASS."

"Let every man that is not a man of nothing leave his house and come!"

Such was the summons which was sent in old English times through town, village and hamlet when there was need for a general call to the battle-field. There is need for such a call to-day, but in a service vastly different than that of any earthly king. It remains yet to be seen whether the Christian Churches fully understand the actual state of affairs, and whether they will rise to the emergency of the times. We are face to face with a foe, a scientific foe, which, if Christianity does not overcome, will assuredly overcome Christianity. Its grip is tightening on our intellectual and religious life. It runs riot through our seminaries of learning and our schools of philosophy, and its teachers are working the necessary result in the destruction of common-sense and logical reasoning. Let men call it by what name they will, it is Atheism, logically and essentially, for it is the essence and basis of MATERIALISM! Such is Modern Theoretical or Mathematical Astronomy, refute it who can?

As our friend "Zetetes" has favoured us with a report of a "Christian Evidence Lecture" which he attended, we have pleasure in printing it here, as it goes to shew the truth of our correspondents, contention, viz.: that those who teach the theories of Modern Astronomy, Geology and Evolution, are teaching that which is anti-scriptural, and therefore they are unconsciously, perhaps, in a state of rebellion against God and His Christ! It is written, "for this cause God shall send them strong delusions." What cause? Why, that which is given in the previous verse: "Because they received not the love of the truth." (2 Thess. ii. 10-11.) Think not that because you are a Christian you will escape the governmental judgment of God. It is a divine and unalterable principle that "whatsoever a man soweth, that shall he also reap." Beware, then, for Modern Astronomy makes God a liar, and, so far as it can, dethrones Him from His rightful place in the universe. ∴ BEWARE, then, for "GOD WILL MAKE THE QUARREL OF SCRIPTURE HIS OWN QUARREL."

"On the 12th of March a lecture was delivered in the Mere Road Hall, North Evington, Leicester, by Mr. A. J. Waldron, the subject advertised being "Science and the Bible." The speaker is one of the principal lecturers for the Christian Evidence Society, and is presumably engaged to defend the Bible against the attacks of modern infidelity.

\* See Professor Carpenter's statement given in the article on "Gravitation."

Being interested in the subject, and venturing to hope that the Bible would be ably defended, I went to hear the lecture. It was soon apparent that the lecturer had more faith in Science than in the Bible.

The lecture was illustrated by beautiful lime-light views ; but it was a pity that many of these were found to be in support of the erroneous teachings of Modern Astronomy, rather than the inspired teachings of holy men of old, who spake as they were *moved by the Holy Spirit*. The beautiful opening hymn, "Crown Him Lord of all," which was thrown upon the screen, was spoiled in one of its stanzas by the couplet :—

" Crown Him, ye morning stars of light  
Who fixed this floating Ball."

It was not explained how a "floating" ball could be "fixed," or, if "fixed," how it could possibly be whirling through "space," as we were afterwards informed, at "nineteen miles per second."

The lecturer avowed his belief in the nebular theory of La Place, which he illustrated by the first view thrown on the screen. All matter was originally atomic. The atoms, though lying or floating about idly for unknown ages, suddenly received an impulse called gravitation which made them rush together and form worlds or suns. Thus then "our sun" was first formed, then the planets and the earth as off-shoots from its whirling motion.

The writer, who was allowed to speak for a few minutes after the lecture, pointed out how and where this infidel theory contradicted the teachings of the Holy Scriptures. He said that when a man came before us to lecture on Christian Evidence we had a right to expect him to support Scripture teaching, not to contradict it, nor to nullify it by wresting it to "harmonize" with the improved theories of modern philosophers. That, as Thomas Paine (who had been quoted) had shown, we could not consistently believe both modern astronomy and the Bible, and that as an honest man the lecturer should give up either the Bible or his so-called "science," and not go amongst Christians teaching them that the Bible is "not a perfect guide" or book, that the world was *not* made in six days, but evolved through "millions of years," and that man's body was *not* made out of the "dust of the ground," but had with greater probability been evolved from the lower animals and monkeys, during vast periods of time.

As the lecturer had gone out of his way to ridicule the "flat earth folks," many of whom ("about a thousand") he confessed to having met with in the North of England, the writer owned himself, before all the audience, to be one of this despised set, and he asked the lecturer if he

would agree to debate the subject with him as to whether the Plane Earth teaching or the Globular Theory is in harmony with the Word of God? I need hardly say that the challenge was declined, but declined in a flourish of words, intended, doubtless to cover up the untenableness of the lecturer's position. But if this lecturer's position is a sample of the "Christian Evidence" abroad, then I say, may the Lord deliver us from such evidence. It is calculated to make more infidels than ever it can convert to the truth of God. When will professed Christians see that the Zetetic position is the only consistent attitude for one who professes to believe in Christ. He upheld the teachings of Moses, and if we believe not Moses' writings, *how* shall we believe *His* Word?"

---

### MODERN ASTRONOMY DEFEATED.

---

#### PORTSMOUTH CAPTURED THROUGH A "BREACH."

Everybody who knows Mr. Ebenezer Breach, personally or by reputation, will be interested to learn that his withers are unwrung by the ordeal of noise and interruption to which he was subjected on the occasion of his recent lecture at the Albert Hall in furtherance of his theory that the earth is flat and fixed and the centre of the universe. He has favoured us with a sight of a cheering letter from Lady Blount, who is as strong a believer as himself in the theory which he so prominently advocates in Portsmouth. The letter is reproduced below.

#### COMPLIMENTS FROM LADY BLOUNT.

" Bath, Monday.

"DEAR MR. BREACH,—Many thanks for the papers. How prominent and what *lengthy* reports!

"I *trust* that it *may* do good. But you must have had a *very trying* time! However, I am sure you are repaid for all your suffering—if the desired end is gained. You evidently are *much* favoured in Portsmouth.

"With every kind wish and remembrance to yourself and yours—together with congratulations from—

"Yours ever sincerely,

"E. A. M. BLOUNT."

#### SCORN FROM MAJOR-GENERAL DRAYSON.

Mr. Breach's original intention in regard to his last public appear-

ance was to make it the occasion of a platform discussion of matters astronomical with Major-General Drayson, of Southsea, who in general holds the orthodox views which Mr. Breach so mercilessly attacks. With a view to arranging such a discussion, Mr. Breach addressed a letter to General Drayson in which he made the following challenge :—

“This is to certify that I, Ebenezer Breach, am desired by Lieut. Pearse and several gentlemen of the Borough of Portsmouth to invite General Drayson, Professor of Astronomy, to a public discussion, to be held in the Albert Hall, Portsmouth, on or about the 1st or 8th day of April next, as may suit your convenience.”

#### THE CHALLENGE DECLINED.

General Drayson promptly declined the challenge. In his reply he wrote :—

“You have omitted to mention upon what subject the discussion is to be. I assume, however, it is upon your opinion of the earth being a flat surface. In an interview which I had with you a few years ago, I ascertained that you denied the accuracy of geometry and mathematics. You also denied that various facts known and observed by millions of people ever occurred. You selected texts from the Bible, placed your own interpretation on them, and then asserted that those persons who did not agree with those opinions disbelieved in the Bible.

“Under these circumstances, any discussion with you would be mere waste of time.

“When you can calculate the instant of time when an eclipse of the sun or moon will occur, when, by measured altitudes of the sun, you can navigate a ship from England to Australia, when, on the assumption of the earth being a flat surface, you can explain how it is that at the same instant the sun is just setting in America ; then, perhaps, a discussion might be of use.

“You name the 1st of April. It might be suitable.”

#### MR. BREACH RENEWS HIS OFFICE.

Mr. Breach's reply to this communication was calmness itself. He acknowledged General Drayson's kind letter, which he construed as expressing willingness to undertake a public discussion if it was not made to turn on Scripture, and he added, “By no means make it a Scriptural discussion. No ! No !” Mr. Breach went on to say that when he suggested April 1st as a suitable date it had not struck him that the First was “derided by the almanack.” He now suggested Thursday, the 16th,

instead. As to his description of himself in the original challenge, he explained :—“When I wrote near 40 verses on ‘The Spanish Armada,’ under the patronage of the late Colonel Strange, the *Universe* Roman Catholic paper, styled me ‘The Portsmouth Poet’ ; when I wrote 50 verses on Queen Elizabeth, the same paper said that ‘as a comic poet I was unrivalled.’ I have been twice patronised by Her Majesty and once by the Duke of Edinburgh, and have letters to show. Was acting writer 15 years in H.M. Dockyard, &c.” As to the astronomical tests which General Drayson suggested, Mr. Breach declared that he would have no difficulty whatever in meeting them.

#### THE CHALLENGE AGAIN DECLINED.

General Drayson in his reply adhered to his refusal to enter upon a public discussion. “I am aware,” he wrote, “that you are entirely unacquainted with even the elements of geometry, that proof is unintelligible to you.”

#### OUT OF HIS OWN MOUTH.

In forwarding these correspondence to us for publication, Mr. Breach quotes the following extract from a lecture on astronomy delivered by General Drayson before the Portsmouth Literary and Scientific Society :—

“It is not necessary that we should become profound mathematicians or geometers in order to comprehend the movements of the celestial bodies and take an interest in this subject. In fact, I have found some of the most celebrated mathematicians very deficient in reasoning ; and I am convinced that over-training tends to weaken the intelligence. I am reminded here of the remark of a crammer who instructed a very apt pupil in mathematics. After two years' instruction the crammer remarked to his pupil, ‘It is very odd, but the more proficient you become in mathematics, the more you lose your common-sense.’” \*

Whereupon Mr Breach makes this cutting comment :—“This goes to prove that if I were willing to forego my common-sense by being proficient in mathematics, the General would have no objection to a discussion, but he cannot attempt a discussion with individuals that have not lost their common-sense.”—*The Evening News*, April 14th, 1896.

\* This doubtless accounts for “Captain Abney, at a meeting of the Camera Club, stating that he would rather be styled a ‘tom fool’ than a ‘Scientist.’”—*Science Siftings*, April 16th, 1892, p. 404.



## ASTRONOMICAL NOTES.

### ECLIPSE OF THE MOON ON 28TH FEBRUARY.

*To the Editor of the Belfast News Letter.*

SIR—I have been requested to direct attention to the forthcoming eclipse of the moon, which will take place on the 28th instant, and have much pleasure in doing so.

On Friday next this interesting phenomenon will take place during the ordinary observing hours of the evening, and will, no doubt, attract some attention should the weather prove favourable. The first contact of the disc of the moon with the shadow of the earth will take place at about eight minutes to six o'clock in the evening; the middle of the eclipse happening at twenty-two minutes past seven o'clock; and the last contact of the moon's disc with the earth's shadow will take place about nine o'clock p.m. The eclipse will be a partial one, but a large area of the lunar disc will be immersed in the shadow of the earth. If the diameter of the moon be taken as unity, the magnitude of the eclipse will be 0.87. The first contact of the lunar disc with the shadow may be looked for at 85 degrees eastward from the northernmost portion of the limb of the moon; and the last contact with the shadow will take place at 30 degrees from same starting point in a westerly direction.

It will be interesting to those people who have recently been treated to a dissertation on the non-rotundity of the earth by a member of the so-called Zetetic Society (an association formed with the object of proving, amongst other things scarcely orthodox from an astronomical point of view, that the earth is not a sphere, but is rather a great flat plain), to watch the well-defined circular shadow which the earth will, by its interposition between the sun and moon, cast upon the disc of the latter body.—Yours truly,

W. REDFERN KELLY, F.R.A.S.

Dalriada, Malone Park, Belfast,  
24th February.

[To the above letter the following one was sent, the Editor promising our friend who had a personal interview with him, that he would give it his "faithful consideration." That he kept his word will be seen from his reply at the end of the letter.—Ed. *E.R.*]

*To the Editor of the Belfast News Letter.*

SIR,—In your issue of yesterday, I observe an article by Mr Redfern Kelly, relative to the coming lunar eclipse. In that article reference is made to the Zetetic Society and its contention, viz:—that the earth is not globular. This indeed is the contention, and the Society is indebted to Mr. Kelly for the opportunity thus afforded of giving some of their views publicly, particularly in this instance with regard to eclipses. Now, the fact may be gainsaid, but cannot be logically denied, that the surface of standing water is other than horizontal. Water has been proved repeatedly by the Zetetic School to be flat or level, without curvature. Such being the case the earth must and does conform to that configuration with the sun and moon above the surface. With such conditions it is obvious a shadow of the earth cannot operate both luminaries being overhead, and several instances are on record where eclipses have taken place when sun and moon have been above the horizon, the earth being out of range of both. Of course it will be argued that refraction operated in such cases, and at first this explanation may appear plausible, but on carefully examining the subject it is found to be inadequate, and those who have recourse to it cannot be aware that the refraction of an object and that of a shadow are in opposite directions. An object by refraction is bent upwards, but the *shadow* of any object is bent downwards, as will be seen by the following simple experiment:—Take a plain white shallow basin, and place it ten or twelve inches from a light in such a position that the *shadow* of the *edge* of the basin touches the centre of the bottom. Hold a rod vertically over and *on* the edge of the shadow, to denote its true position, now let water be gradually poured into the basin, and the shadow will be seen to recede or *shorten inwards* and *downwards*, but if a rod or a spoon is allowed to rest, with its upper end toward the light, and the lower end in the bottom of the vessel, it will be seen as the water is poured in to bend *upwards*—thus proving that if refraction operated at all it would do so by elevating the moon above its true position, and throwing the earth's shadow downwards, or directly away from the moon's surface. Hence it is clear that a lunar eclipse by a shadow of the earth is not possible. It is admitted by Herschel and other astronomers that invisible bodies exist in the firmament, and such an amount of evidence on this point has accumulated as to put the matter beyond all doubt—such bodies, though invisible to the naked eye, become apparent when in a line between an observer and a luminous body like the moon, the intervention of such a body (says the celebrated Zetetic Astronomer known as "Parallax") is the direct cause of a lunar eclipse. There are instances on record showing that some other cause existed than that of the earth's shadow to produce an eclipse.

Mr. Walker, who observed the lunar eclipse of March 19th, 1848, near Collumpton, says, "the appearances were as usual until twenty minutes past nine, at that period, and for the space of the next hour, instead of an eclipse or shadow (umbra) of the earth being the cause of the total obscurity of the moon, the whole phase of that body became very quickly and most beautifully *illuminated*, and assumed the appearance of the glowing heat of fire from the furnace, rather tinged with a deep red, the *whole disc* of the moon being as *perfect with light* as if there had been no eclipse whatever. **THE MOON POSITIVELY GAVE GOOD LIGHT FROM ITS DISC DURING THE TOTAL ECLIPSE.**" Of course it will be asked how the phases of the moon can be accounted for on the Zetetic basis. The reply is, the moon is semi-luminous, shining with an *independent light of its own*, one side is illuminated and the other not, as it revolves, all the phases we are familiar with become apparent, that the moon is not a perfectly opaque body, but a crystallised substance, is shown from the fact that when a few hours old or even at quarter we can through the unilluminated portion see the light shining on the other side. Stars have also been observed through her surface. In conclusion (for I have already transgressed with regard to valuable space), I would observe that a system requiring for its support such a condition and such belief as that associated with the antipodian theory, must necessarily be absolutely theoretical, and consequently devoid of *any facts!*

J. ATKINSON.

26th February, 1896.

"BELFAST NEWS LETTER" OFFICE,  
BELFAST, 28th Feb., 1896.

Declined with Thanks.

Our Secretary also wrote, his communication received the *same* "faithful consideration."—Ed. *E.R.*

(To be continued in our next).

#### IN MEMORIAM.

We regret to announce the death of our esteemed friend, MR. A. HEASMAN, of Croydon, who fell asleep in Jesus, April 12th, 1896. He was a staunch friend of the late John Hampden, Esq., and a hearty worker in the Zetetic cause.

"Their works do follow them."—Rev. xiv. 13

### ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,

c/o MR. J. WILLIAMS,

32, Bankside, LONDON, S.E.

ICONOCLAST.—Please accept our sincere and hearty thanks for your princely gift to our library of the late Dr. Robert Young's "*Analytical Concordance to the Bible*." We cannot speak too highly of such an invaluable work. Its value as an help to the study of Holy Scripture is far beyond any book of its kind in existence. No Christian's library is complete without it. It is published by George Adam Young & Co., 102 South Bridge, Edinburgh. Price, Cloth Boards, 24/.

"THE PASTOR," BELFAST, and others. Under no consideration whatever will letters be inserted in this journal that are not accompanied with the name and address of the writer. We have received several communications anent the letters "The Faith" v. The Truth, which appeared in our April issue. We print one, which in substance is representative of others received. All alike condemn the action taken on behalf of the *Faith*. We ask all to please remember that our columns are in no sense "theological," therefore, we cannot insert *theological opinions* held by any person or assembly of persons.

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec., post free, to any address in the postal union for 1s 6d per year, in advance.

All monies for the Society must be paid direct to the local Vice Secretaries, or direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Summer Street, S. E.

We have from time to time received many letters asking us to issue this journal every month. We have great pleasure in announcing that in future it will be issued Monthly at its present price and size, and therefore ask the help needed to continue it. We gladly give time and labour *free*, but the printer must be paid, therefore we ask the co-operation of *all Zetetics* to assist us to increase its circulation and so help us in our testimony for God's Truth as found in Nature and taught in His Word.

Mr. C. Harpur has favoured us with the following extract from the *Weekly Times and Echo*, 18th April 1896;—N. M. X.—There are, we believe, still a few amiable lunatics who believe in the "flat earth" theory. Excuse our attempting to define their "reasons!"—We take the liberty of informing this Editor that we are prepared to discuss "their reasons" for believing the earth to be a globe any time he is *MAN enough* to open his columns to us and *any* official astronomer or geographer who likes to step into the arena. Will the cowards do it? Please remember that it is the language stultifying, speculating and contradictory assertions of modern theoretical astronomy that has *caused* us to be "lunatics"!!! Remove *the cause*, Mr. Editor of the "Weakly Times and Windy Echo," and *the effects* will cease!

## CONTENTS OF OUR LETTER BOX.

DEAR SIR,—I gratefully acknowledge receipt of No 1 of your new monthly. I had purchased all the old issues from Mr. Coleman, and read them with great pleasure. It is twelve years since I gave up the anti-biblical and brain-muddling Globular theory, preferring to rest my faith on the explicit statements of the Bible, rather than upon the "imaginary facts" of "science." 'falsely so-called.' I think that the form, size, contents, and general get-up of your new series is *almost perfection*; and the price being only the popular "One Penny," should result in a much larger circulation.

With regard to the correspondence with the editor of *The Faith*—which I thought was intended to be merely a representation of "Life and Advent" truth, I would say for *myself* that I feel greatly discouraged when I see other subjects such as Astronomy, etc., first introduced by the editor and some of his principal contributors, and then when a brief suggestion or reminder of "what saith the Scriptures" on those subjects is sent for publication, the only answer given is—"the advocacy of the matter named forms no part of the testimony of the magazine!"

I once listened to the editor of "Zion's Watch Tower" for upwards of *six hours!* and I was not tired of him then. I love much of what he has written, but I certainly don't think his astronomy is BIBLE ASTRONOMY! I am glad to see Mr. Smith's article.

In Victoria Park, London (1884), I saw a medical doctor apologising to an Infidel Lecturer (a blacksmith), for the ignorance of Bible writers on Astronomy!!!

May God speed you in your labours for His truth.

EDWARD HOBBS.

DEAR SIR,—The monthly issue of the *E.R.*, if kept at its sample level, will be worth more than libraries of Newton, La-

Place, Herschell, Darwin, Huxley, Spencer, Tyndall & Co.'s, mind-muddling, hypothetical mixtures; the former directs to "Thinking Manhood," whereas the latter must eventually land its votary to "Monkeyhood"—or worse—an "un-thinking thing in man's shape!"

Who's for Manhood?

Yours, etc,

ICONOCLAST.

Dreghorn

DEAR SIR,—I shall be glad to know if you have given the subject of vacuum any study. It is generally asserted that vacuum is powerless, but after enquiring into the subject I find in general that the man who works with it every day knows little or nothing about it! According to the G. & S. W. R. Coy.'s working Time Table, engine drivers are earnestly requested to see and have 18 inches of vacuum before leaving each station. Now, their brake is called the "vacuum brake," and when you question the engine-drivers about it, they all without a dissenting voice maintain that it is the atmosphere that does the work. After perusing J. Hampden's article on "Atmospheric pressure as fabulous as the rest," I have always seized every opportunity of enquiring into the matter, and find it to be as he described it to be. I am well acquainted with an engine-driver here who is working a pumping engine daily, and he, after I directed his attention to it, pronounced the popular scientific theory to be a down-right farce. He can suggest an experiment with a pumping engine which would settle the matter and place it beyond dispute. If you think it will be of any value to you I could submit you a diagram and a detailed explanation; also, he assures me that so-called "atmospheric pressure" has absolutely nothing to do with syphon pipes, as he has proved over and over again.

Yours in truth,

R. M'CORMICK.

—THE—

## EARTH-NOT A GLOBE-REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No. 4-5 (MONTHLY SERIES). JULY-AUGUST, 1896. PRICE 1D.

"UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. V.

The following extracts are taken from Blair's Grammar of Philosophy. (p. 343 &c.):—

"Philosophers of past ages, to account for the action and reaction of matter which produce material phenomena, ascribe powers to *inert* matter, to which they gave the names of *attraction* and *repulsion*; one, for the power by which bodies and atoms go together, and the other for the power by which they separate. The idea was first promulgated by Empedocles, who called them Friendship and Strife!"

"The convention about the terms was, however, soon extended, and Newton first ascribed the fall of bodies to the attraction of the Earth, and then the motions and order of the planets to the attraction of the Sun, calling it Gravitation. On so obscure a subject, in which faith preponderated over reason, the world were easily mystified, and though attraction and repulsion were not essentially different from witcheries and charms, an association with geometry made them appear plausible, and author's now adopt them without reserve, as sufficient and satisfactory causes."

"No body acts WHERE IT IS NOT PRESENT; nor acts in a direction in which it is not itself in force. If a body move from north to south, it is evidence that some motion has been transferred to it in that direction; and if it move towards a body in the south, its motion is

## CONTENTS OF OUR LETTER BOX.

DEAR SIR,—I gratefully acknowledge receipt of No 1 of your new monthly. I had purchased all the old issues from Mr. Coleman, and read them with great pleasure. It is twelve years since I gave up the anti-biblical and brain-muddling Globular theory, preferring to rest my faith on the explicit statements of the Bible, rather than upon the "imaginary facts" of "science." 'falsely so-called.' I think that the form, size, contents, and general get-up of your new series is *almost perfection*; and the price being only the popular "*One Penny*," should result in a much larger circulation.

With regard to the correspondence with the editor of *The Faith*—which I thought was intended to be merely a representation of "Life and Advent" truth, I would say for *myself* that I feel greatly discouraged when I see other subjects such as Astronomy, etc., first introduced by the editor and some of his principal contributors, and then when a brief suggestion or reminder of "what saith the Scriptures" on those subjects is sent for publication, the only answer given is—"the advocacy of the matter named forms no part of the testimony of the magazine!"

I once listened to the editor of "Zion's Watch Tower" for upwards of *six hours!* and I was not tired of him then. I love much of what he has written, but I certainly don't think his astronomy is BIBLE ASTRONOMY! I am glad to see Mr. Smith's article.

In Victoria Park, London (1884), I saw a medical doctor apologising to an Infidel Lecturer (a blacksmith), for the ignorance of Bible writers on Astronomy!!!

May God speed you in your labours for His truth.

EDWARD HOBBS.

DEAR SIR,—The monthly issue of the *E.R.*, if kept at its sample level, will be worth more than libraries of Newton, La-

Place, Herschell, Darwin, Huxley, Spencer, Tyndall & Co.'s, mind-muddling, hypothetical mixtures; the former directs to "Thinking Manhood," whereas the latter must eventually land its votary to "Monkeyhood"—or worse—an "unthinking thing in man's shape!"

Who's for Manhood?

Yours, etc,

ICONOCLAST.

Dreghorn

DEAR SIR,—I shall be glad to know if you have given the subject of vacuum any study. It is generally asserted that vacuum is powerless, but after enquiring into the subject I find in general that the man who works with it every day knows little or nothing about it! According to the G. & S. W. R. Coy.'s working Time Table, engine drivers are earnestly requested to see and have 18 inches of vacuum before leaving each station. Now, their brake is called the "vacuum brake," and when you question the engine-drivers about it, they all without a dissenting voice maintain that it is the atmosphere that does the work. After perusing J. Hampden's article on "Atmospheric pressure as fabulous as the rest," I have always seized every opportunity of enquiring into the matter, and find it to be as he described it to be. I am well acquainted with an engine-driver here who is working a pumping engine daily, and he, after I directed his attention to it, pronounced the popular scientific theory to be a down-right farce. He can suggest an experiment with a pumping engine which would settle the matter and place it beyond dispute. If you think it will be of any value to you I could submit you a diagram and a detailed explanation; also, he assures me that so-called "atmospheric pressure" has absolutely nothing to do with syphon pipes, as he has proved over and over again.

Yours in truth,

R. M'CORMICK.

—THE—

## EARTH-NOT A GLOBE-REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No. 4-5 (MONTHLY SERIES). JULY-AUGUST, 1896. PRICE 1D.

"UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. V.

The following extracts are taken from Blair's Grammar of Philosophy. (p. 343 &c.):—

"Philosophers of past ages, to account for the action and reaction of matter which produce material phenomena, ascribe powers to *inert* matter, to which they gave the names of *attraction* and *repulsion*; one, for the power by which bodies and atoms go together, and the other for the power by which they separate. The idea was first promulgated by Empedocles, who called them Friendship and Strife!"

"The convention about the terms was, however, soon extended, and Newton first ascribed the fall of bodies to the attraction of the Earth, and then the motions and order of the planets to the attraction of the Sun, calling it Gravitation. On so obscure a subject, in which faith preponderated over reason, the world were easily mystified, and though attraction and repulsion were not essentially different from witcheries and charms, an association with geometry made them appear plausible, and author's now adopt them without reserve, as sufficient and satisfactory causes."

"No body acts WHERE IT IS NOT PRESENT; nor acts in a direction in which it is not itself in force. If a body move from north to south, it is evidence that some motion has been transferred to it in that direction; and if it move towards a body in the south, its motion is

no evidence that the body in the south impels it on its opposite side from the north, or from parts where the body in the south is not present."

"This obvious truism is the contrary of what is maintained by every existing system of scholastic philosophy. When the affection which moves a body is not immediately explicable, it is absurdly inferred that it is moved by the body *towards which it is moving*, and, thereby, it is superstitiously asserted, that *a body acts WHERE IT IS NOT PRESENT!*"

"The examination of all these peculiarities is knowledge and philosophy; whereas, the *assertion* that the body in the south impelled that in the north, acting *WHERE IT WAS NOT PRESENT*, and with such force as to confer impulse from *the opposite side* is irrational, trifling and superstitious."

"By a false analogy, equally as absurd as the notion about attraction, bodies are also said to *draw* one another. Now, a horse draws a cart by harness; a boat is drawn to the shore by a rope, and, in other cases, we draw by ropes and pulleys. Yet, no drawing-tackle is present in the cases referred to."

"We may destroy for ever all the absurdities of the dark and obsolete theories about *powers* of Attraction and Repulsion, or Universal Gravitation in matter by the following plain considerations; and it is necessary to be particular on this point, since the schoolmen and their adherents insult all common-sense by their declamations."

"Let A B C D be considered as a ball of any material, as ivory, metal or cork.



Now, if this ball be laid in any *level place* for any length of time, it will be found in the same spot, and be moved neither to the side A, or B, or C, or D.

But, if by the force and motion of the finger, or of any other moving body it is acted upon at the side A it moves towards C; if on the side C to A; or, if at B to D; or if at D towards B. In fact it can only move *towards* any part by some external force INTELLIGENTLY APPLIED *to the OPPOSITE SIDE*; and this force on the side *opposite* to that towards which the motion takes place, is a necessary, obvious and constant feature of *all force, and all motion universally.*"

(To be Continued.)

## ASTRONOMICAL NOTES.

*To the Editor of the Belfast News Letter.*

SIR,—May I with your kind permission ask W. Redfern Kelly, Esq., F.R.A.S., to answer in your columns the following questions:—

1st—Prove by any practical demonstration that it is "the shadow of the earth" that eclipses the moon.

2nd—Why is it that the "shadow" is not always a globular one, and not always the same size?

3rd—As the duration of the eclipse of the moon on February 28th lasted 3 hours 8 minutes, will he kindly explain why eclipses in Ptolemy's time lasted over 4 hours?

4th—Is it not possible that one of the "dark bodies" which Anaxagoras said "were lower than the moon and move between it and the earth" is the cause of lunar eclipses? If not, why not?

5th—Will he, by a *practical experiment upon the earth's surface*, or surface of standing water anywhere in the world, give us ONE proof that the earth is "an oblate spheroid?"

Awaiting his esteemed replies, which I trust for the elucidation of Truth you will allow me to reply to.—I remain, yours respectfully,

J. WILLIAMS,  
*Hon. Sec.*

Universal Zetetic Society,  
32 Bankside, London, S.E.

"BELFAST NEWS LETTER,"  
BELFAST.

Declined with Thanks.

Our friend A. Smith also sent the following communication. It was silently declined *without* thanks.—Ed.

*To the Editor of the Belfast News Letter.*

SIR,—In your issue of Tuesday, February 25th, I noticed a letter referring Zetetics to the eclipse of the moon on the 28th of the same month for a proof of the supposed globularity of the earth.

If the writer had first given proof that it *is* the shadow of the earth which falls upon the moon, there would have been some support for his

contention; but he, like all astronomers, first *assumes* that it is "the shadow of the earth," and secondly, that nothing but a globe can cast a circular shadow! Let him clear his argument, if we can call it one, of these underlying assumptions which vitiate it, by giving some proof of his premises, then I will, with your kind permission, examine whether his conclusions necessarily follow.

I, as one of those Zetetics your correspondent refers to, did watch the eclipse as far as the cloudy state of the sky would permit, and I must state that I drew conclusions from the phenomena very different from those he would draw, and in favour of the Zetetic position.

As Mr Kelly seems kindly disposed towards the "so-called Zetetic Society," and seeks to instruct them in correct astronomical principles, he will perhaps, after giving the proofs above asked for, be good enough to instruct us on the following points:—

(1) Why did the "shadow of the earth" begin to obscure the moon's light on her eastern limit?

(2) Why did the "shadow" not go right across the moon's disc, *i.e.*, in the same general direction, as all the bodies involved continued in the same course as they were in when the eclipse commenced?

(3) Why did the "shadow," after commencing to obscure the moon on her left or eastern edge, gradually disappear at the top or upper surface of the moon?

(4) If the moon's light be only reflected sunlight, why is not *all* that light cut off when the earth is supposed to come in between the sun and the moon? In other words, how is it the moon's disc can be dimly seen when and where the illuminating light is cut off, even to the extent of a total eclipse? And

(5) Can your correspondent give us any testimony whatever, not vitiated by astronomical hypothesis, going to prove that the earth, which ordinarily feels so stable, has any of the awful motions attributed to it?

If facts can be shown in answer to the above questions, and in favour of the popular contention, I can promise your correspondent that his efforts will not be thrown away on Zetetics, because, as far as I am acquainted with them, and as their name implies, they are honest and fearless investigators of the truth in these matters.—I am, Sir, yours respectfully,

ALBERT SMITH,

23 East Park Road, Leicester.

The following letter will show that the Editor of the *Belfast News Letter* is quite unbiased!!

*To the Editor of the Belfast News Letter.*

SIR,—Having come across Mr W. Redfern Kelly's letter on the above in your issue of the 25th, it occurred to me that the writer is mistaken in thinking the Zetetic Planeist's (as they call themselves) ideas can be injured or swept away by such superficial remarks. Unfortunately for the globular side, many eclipses have taken place when the sun has been above the observer's horizon, thus nullifying at once the generally accepted idea that it is the shadow of the intervening earth projected on the moon by the sun. Again, the moon is recorded to have been eclipsed by a triangular shadow. This, of course, makes the Newtonians' case still worse. As to the accepted idea that the fortelling of eclipses proved the truth of the Newtonian hypothesis, this must be only mentioned to be ignored, it being well known and allowed by those who have studied this branch of astronomy to be merely a matter of correct observations during a series of years to foretell the exact time of either lunar or solar eclipses for an indefinite number of years, and has nothing whatever to do with the shape of the world.

I trust the writer of the letter in question and other champions of the Newtonian system in Belfast will see the weakness of their attack in this instance, and take counsel, so as to attack these stubborn-minded globe-smashers or planeists in a more vulnerable position. Apologising for trespassing on your valuable space, and thanking you in anticipation for inserting my letter.—I am, dear sir, yours,

H. H. D'ARCHY ADAMS.

March 10th.

[Our columns are open to Mr Redfern Kelly, F.R.A.S., C.E., and we herewith respectfully challenge that gentleman to reply to our questions, and demonstrate the teaching of the R.A.S. that we live on a Dutch-cheese-shaped sea-earth-globe.—ED.]

Said an honest Marshfield farmer as he met the clergyman of the village very early in the opening day:

"Ah, good mornin', parson! Another fine day."

Then he nodded his head significantly towards the sun, just appearing above the cloudless horizon of Massachusetts bay, and added:

"They do say the airth moves and the sun stands still; but you and I, parson, we get up airly, and we see it move."—Ex.



## THE BEDFORD CANAL.

## THE ASTRONOMERS SILENCED,

OR,

*How "PARALLAX" demonstrated that what Mr R. A. Proctor said,  
in reference to the surface of water in the above canal was*

ABSOLUTELY CORRECT!

Mr Proctor, in his "Myths and Marvels of Astronomy," page 280, says: "Of course, if he ['Parallax'] had with his eye a few inches from the surface of the Bedford Canal seen an object close to the surface six miles from him, there manifestly would have been something wrong in the accepted theory about the earth's rotundity."

With that admission and the following FACT, all honest investigators of Nature will see that the globe theory is doomed, for this is what "Parallax" saw:—"A train of empty turf boats had just entered the canal from the river Ouse, and was about proceeding to Ramsay, I arranged with the captain to place the shallowest boat last in the train, and to take me on to Welney Bridge, a distance of six miles. A good telescope was then fixed on the lowest part or stern of the last boat. The height of the telescope above the water was exactly 18 inches. The sluice gate of the Old Bedford Bridge was 5 feet 8 inches high; the turf-boat moored there was 2 feet 6 inches high, and the notice board was 6 feet 6 inches from the water. The sun was shining strongly upon them in the direction of the south-south-west, the air was exceedingly still and clear, and the surface of the water smooth as a molten mirror, so that everything was favourable for observation. At 1.15 p.m. the train of empty boats started for Welney. As the boat gradually receded, the sluice gate, the turf-boat, and the notice-board continued to be visible to the naked eye for about four miles. When the sluice gate and the turf-boat—being of a dark colour—became somewhat indistinct, the notice-board—which was white—was still plainly visible, and remained so to the end of six miles. But on looking through the telescope all the objects were distinctly visible throughout the whole distance. On reaching Welney Bridge I made very careful and repeated observations, and finding several men upon the banks of the canal, I called them to look through the telescope. They all saw distinctly the white notice-board, the sluice gate, and the black turf-boat moored near them. Now, as the telescope was 18 inches above the water, the line of sight would touch

the horizon at one mile and a half away—if the surface were convex. The curvature of the remaining four miles and a half would be 13 feet 6 inches. Hence the turf-boat should have been 11 feet, the top of the sluice gate 7 feet 10 inches, and the bottom of the notice-board 7 feet below the horizon."—(THE ZETETIC, April, 1873.)

Small wonder that Mr Proctor declined the challenges of "Parallax" and John Hampden, Esq., to go to the canal and see it for himself. He saw what results would follow, and so do all astronomers and geographers, hence their dogged and cowardly silence. They dare not face the facts hence Mr J. DYER, author of the "*Spherical Form of the Earth*," when challenged by "Parallax" at Penge Hall, replied, "Yes this is the way 'Parallax' is in the habit of dealing with his opponents, and really it takes the wind out of us! It seems to an audience so fair and above board that very often they think we ought to go, and that we hav'nt a leg to stand on unless we do. But I beg to say that *I entirely decline* to do anything so *foolish*."—THE ZETETIC, June, 1873.

## "ANSWERS" ANSWERED AND QUESTIONED.

"The steeple, or stump, as it is locally called, of the Parish Church of St. Botolph, at Boston on the south-east coast of Lincolnshire, near the Wash, has long been utilised as a lighthouse. The tower is 290 feet in height, and resembles that of Antwerp Cathedral, being crowned by a beautiful octagonal lantern. This tower BEING VISIBLE 40 MILES DISTANCE serves as a lighthouse to guide mariners when entering what are called the Boston and Lynn Deeps."—*Answers*, May 2nd, 1896.

Now, Sir, if the curvature of the earth is, as stated by modern astronomical teachers, 8 inches to the mile, multiplied by the square of the distance in miles—viz.,  $40 \times 40 = 1,600$  miles,  $\times 8$  inches = 1,066 ft., 8 inches. Deduct for height of tower, say 300 feet, leaves 766 feet, 8 inches—the lighthouse should be hid, up on globular principles, 766 feet behind the earth curve.

This is a parish church proof that the world is not a globe but a plane.

We respectfully request the Editor of *Answers*, or "the office-boy," whom he "expects to have ready a comprehensive and convincing volume on the subject of the earth going round the sun in something less than 9 years," to instruct us why every lighthouse in the world can be seen at distances utterly incompatible with, and contradictory of the teaching of modern astronomers and geographers?

*N.B.*—This question is also open for replies from admirals, captains and navigating lieutenants of H.M. Navy.

## THE USHANT LIGHTHOUSE PROVES THE WORLD TO BE A PLANE.

*To the Editor of the Standard.*

SIR,—As the Ushant lighthouse has been frequently mentioned in connection with the ill-fated Drummond Castle, it may interest some of your readers to know that the Ushant electric group-flash light, one of the most beautiful on the French coasts, and installed in the year 1888, has a luminous power, photometrically tested, of no less than six million five hundred thousand candles (about the same as that of Barfluer Point, east of Cherbourg, and that of St. Catherine's Point, Isle of White), corresponding to a luminous range of fifty nautical miles in average clear weather, while its geographical range or direct visibility to the horizon, corresponding to the height of the focus (sixty-eight meters, or two hundred feet) above high-water level, is twenty-three nautical miles.

In hazy weather, such as appears to have prevailed at the time of the disaster, the luminous range of the flashes, grouped in two and about half a second in duration, is reduced to about twenty nautical miles, while in very thick weather it may drop to three or four miles. In very hazy or foggy weather the compressed air siren with which the lighthouse is provided emits, at regular intervals, blasts three seconds in duration. It is, therefore, not unreasonable to argue that, if the weather was only hazy, the Ushant light must have been visible, or, if the weather was very thick, at all events, the powerful blasts of the siren must have been heard on board the Drummond Castle. . . .

I am, Sir, your obedient servant,

C. S. DU RICHE PRELLER.

18, Margaret-street, Cavendish-square, W.

*To the Editor of the Standard.*

SIR,—Is it absolutely certain that the N.W. light at Ushant was all right between ten and twelve on Tuesday night?

We have the evidence of several masters and officers that they did not see it. Is there anyone that has entered in his log that he did see it, and took his departure from Ushant N.W. light on Tuesday night?

For the credit of the British mercantile marine this point ought to be cleared up.

I am, Sir, your obedient servant,

BASIL CORNWALL-JONES.

4, Seldon-terrace, Selsdon-road, Croydon,

June 22, 1896.

The following letter was sent in reply to the above, and was inserted into the waste-paper basket (Ed. E.K.) :—

*To the Editor of the Standard.*

SIR.—It should be evident to your correspondents that unless the ill-fated Drummond Castle was within about 15 nautical miles of Ushant lighthouse, that light could *not* be seen by those on board.

Would not the light be hid by the curvation of the earth (water in this instance) to the extent of about 500 feet? See *Chambers' Mathematical Tables*.

Mr. C. S. Du Riche Preller, says, "It is not unreasonable to argue that, if the weather was only hazy, the Ushant light must have been visible." I think it very unreasonable to expect any thing of the kind, that is, if we are living on a globe: and in the interests of the British mercantile marine this point certainly ought to be cleared up at once.

I am, Sir, your obedient servant,

A. E. K.

June 23rd, 1896.

EXTRACT FROM "*Chambers's Information for the People.*" Section on "*Physical Geography*"—page 59.

"In North America, the basin or drainage of the Mississippi is estimated at 1,300,000 square miles, and that of the St. Lawrence at 600,000; while northward of the 50th parallel, extends an inhospitable *flat* of perhaps greater dimensions. . . . Next in order of importance is that section of Europe extending from the German Sea, through Prussia, Poland, and Russia, towards the Ural Mountain, presenting indifferently tracts of heath, sand and open pasture, and regarded by geographers as ONE VAST PLANE. So *flat* is the general profile of the region, that it has been remarked, IT IS POSSIBLE TO DRAW A LINE FROM LONDON TO MOSCOW, WHICH WOULD NOT PERCEPTIBLY VARY FROM A DEAD LEVEL."

This is a "London to Moscow" proof that the world *is a plane*.

### STRIP THE WRETCH.

"We do not know a more hypocritical class of men than that which sneers at Scripture in the name of science. Nor can we see how men can expect to be regarded as intelligent when they discredit the genuineness of Scripture history which they have never investigated. This statement is not one of mere words, because we are justified in making

it, owing to the fact that it is good science which forms Biblical history. But we have waited in vain, when we have asked those who make random assertions in print against the Pentateuch, or any other part of Scripture, to put their arguments in writing and work them out in figures. They cannot do so. Time, in respect to history, is successive production; and, like arithmetic, is a fundamental science being capable of neither addition or reduction. A man would be laughed at who asserted that the number of minutes in an hour could be either increased or diminished, because an hour is an astronomical part of time and a true part of a greater period produced moment by moment by planetary motion. In what way, then, but as an ignorant man, can a person dispute Biblical Time?

What, then, are we to say of the men who have attempted to delude mankind—and, forsooth, in the name of stern science—with the idea that the periods, years, and dates of Scripture are ‘inventions,’ ‘poetic history,’ and belong only to ‘religious enthusiasts!’ Such calumniators thrust out their tongues against the movements of the orbs of heaven. The conduct of a man of this kind is most despicable, and we are determined to strip the wretch of his plumes. He is a scientific juggler and a deceiver, who puts his finger in derision, or doubt, on one of the historical statements of Scripture.

For many years now have these men attempted, in the name of Science, to impugn the accuracy of Scripture history. They have succeeded with some men, but the great mass of Christians have rightly refused their *unfounded assertions*, and with much commendation have waited until the time has arrived when all Biblical periods, years and dates, have become capable of demonstration, by the deductions of the very science which has falsely been used against them.

We affirm—and are always ready to show by figures—that from the ‘first day’ of 0 A.M., of the period known as creation, to the present day, there is an unbroken line of true astronomical time, agreeing with *all* Biblical statements, which it is not possible for any man to challenge. Instead of maligning the Bible, these deceivers and pretended scientists ought to rejoice in a Book which now proves itself to be THE LOG BOOK of the world.

Hands off the sacred page, we say to such scientific pretenders. Such men are not astronomers, because they do not know the *practical* use of astronomy. They are mere star-gazers, to whom the great clock-like mechanism of the heavens is unknown. The Great Architect of the Heavens and the Author of Scripture is one; and the time of the Bible and the heavens are the same.”—*All Past Time*, October, 1887.

## CONTENTS OF OUR LETTER BOX.

DEAR SIR,—A reply to the comment on the following two line extract from *Answers* of May 2nd, 1896, in the next issue of the *Review* will oblige. “The greatest length of England and Scotland, north to south, is about 608 miles”

Taking John o’ Groat’s as the upper point of the arc of a portion of the Globular circle, and Land’s End the bottom, there is a difference of several miles of elevation between the two localities, with a line of railway from place to place, would there be any necessity for steam on the downward journey, and would it really be possible for a locomotive on the return journey to ascend the globular curve with the assistance of that powerful agency, steam, associated even with a cog-wheel arrangement similar to that used on steep mountain railways? J. A.

We prefer to leave this question open requesting that some F.R.A.S. or F.R.G.S. will kindly give our friend an answer. At the same time we would remind them that we have the following statement in our possession: “Upon a sphere, whichever way we go, we travel *down*”; ergo, when Professor Alfred Russell Wallace travelled from Old Bedford Bridge to Welney Bridge he travelled *down*. Will any member of the various scientific societies please to answer the following question: If, on the return journey, Professor Wallace did not travel *up*, by what law of logic and truthfulness could he, or anyone else, assert that the centre of the canal between those two bridges was “the highest?”—ED. E.R.

DEAR SIR,—No. 3 of Vol. III. *E R.* is to hand, for which, thanks. That “ $4=2$  and  $8=4$ .” I take to be an erroneous “interpretation” of the axiom “the doubles of equals are equal”; and I think “Leo Castle” must have mistaken the intended meaning of his mathematical friend.

There may be two distinct interpretations, depending upon the *sense* in which

the terms “equals” and “equal” are used.

Thus if used in the sense of *numerical value*, it will be obvious that if two equal numbers be doubled, the result would be the same in each case, their *numerical value* would still be equal; e.g.  $4 \times 2 = 8$ ; to repeat this operation, would obtain 8 as the result. So that 4 doubled in any number of cases would give 8 in every case.

But if the terms “equals” and “equal” are used with reference to the *character* of numbers, as being either *odd* or *even*, then the axiom would read “if *even* numbers be doubled, the results would be *even*”; e.g.  $4 \times 2 = 8$  which is even;  $8 \times 2 = 16$  which is even;  $6 \times 2 = 12$  which is even, &c., &c.

The former sense is the more probable one in which the terms were used, and possibly in connection with geometry; but the axiom is true in its application to both geometry and arithmetic.

[We are always ready to acknowledge any mistakes we may make, and therefore take this opportunity of stating that not being a “mathematician” we misunderstood the explanation of a friend who is one.—ED.]

How pitiable is the reasoning of Mr C. R. Illingworth, M.D., D.P.H. (London), p. 26. The horizon (*sensible*) is the boundary line of our vision. Let observer’s position be a point, from which as centre, with his line of sight as radius, by turning upon his heels he describes the circumference which we call the horizon, and that, of course, is a circle, lying in a horizontal plane, because the height of observer’s eye above the surface compared with the distance of the horizon less than 3000th does not affect the practical parallelism of earth’s surface and observer’s eye line; it proves nothing as to positive form of earth’s surface for either theory. The string or stick held so as to touch the horizon at two points merely marks off the segment of a circle.—Yours faithfully, G.M.

SIR, — In the recent occultation of Jupiter, why was it occulted in the crescent or light part of the moon ONLY? for it was seen wending its way within the the horns of the crescent, thus :—



so that it must have been seen through the mountains, craters, etc. etc., that is, the solid part of the moon, the shadow of the Earth notwithstanding—if the MOON is a solid globe of mountains, etc., how will the F.R.A.S. account for this phenomenon? I don't know—but I want to—though it doesn't much matter.

JNO. S.

### ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,  
c/o Mr J. WILLIAMS,  
32, Bankside, LONDON, S.E

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec, post free, to any address in the postal union for 1s 6d per year, in advance.

All monies for the Society must be paid direct to the local Vice Secretaries, or direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Sumner Street, S.E.

Our Map Fund is still open awaiting any further subscriptions, friends may be pleased to forward us.

Will friends who have received notification that their subscriptions are due, kindly forward the same to the Secretary at once, as he is greatly in want of funds to continue the Monthly issue.

May we request friends to remember, that in future, a large blue pencil mark—a cross—on the outside of the cover in which the "Review" is sent, signifies that your subscription is due.

The circumstances of our Secretary having been materially altered of late, his time being taken up all day, sometimes until 9 o'clock p.m, friends therefore must please excuse any delay that may occur in getting out the "Review," or replying to any correspondence they may forward him.

We are at the request of a few friends, bringing out an Index to the first eight Nos of the "Review." Will those who would like to have one, kindly communicate the fact to us, as we do not want to print more than will be required.

# —THE— EARTH-NOT A GLOBE-REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No. 6 (MONTHLY SERIES).

PRICE. 1D.

SEPTEMBER TO DECEMBER, 1896.

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. VII.

The following extracts are taken from Blair's Grammar of Philosophy. (p. 382-391, &c.):—

"The power of mutual attraction SUPPOSES that each of the two bodies pushes the other on their opposite sides, where the actor is not present, consequently not in force; for a body does not move except in the direction in which it is impelled. Nor, by a false analogy, do bodies *draw* one another, for there is no drawing-tackle between them."

"The power of mutual *repulsion* implies that each body is in force in a direction contrary to that in which each is moving, for each moves its own way, yet by repulsion is required to act the other way, though *each is moving from the other*, this is a contradiction."

"The power of *gravitation* in its alleged phenomena, that of *falling* bodies, is deemed a variety of attraction, which is essentially absurd, as the Earth does *not* push falling bodies on their remote side towards its own centre!"

SIR, — In the recent occultation of Jupiter, why was it occulted in the crescent or light part of the moon ONLY? for it was seen wending its way within the horns of the crescent, thus:—



so that it must have been seen through the mountains, craters, etc. etc., that is, the solid part of the moon, the shadow of the Earth notwithstanding—if the MOON is a solid globe of mountains, etc., how will the F.R.A.S. account for this phenomenon? I don't know—but I want to—though it doesn't much matter.

JNO. S.

### ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

LEO CASTLE,

c/o MR J. WILLIAMS,

32, Bankside, LONDON, S.E

### EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec, post free, to any address in the postal union for 1s 6d per year, in advance.

All monies for the Society must be paid direct to the local Vice Secretaries, or direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Sumner Street, S.E.

Our Map Fund is still open awaiting any further subscriptions, friends may be pleased to forward us.

Will friends who have received notification that their subscriptions are due, kindly forward the same to the Secretary at once, as he is greatly in want of funds to continue the Monthly issue.

May we request friends to remember, that in future, a large blue pencil mark—a cross—on the outside of the cover in which the "Review" is sent, signifies that your subscription is due.

The circumstances of our Secretary having been materially altered of late, his time being taken up all day, sometimes until 9 o'clock p.m., friends therefore must please excuse any delay that may occur in getting out the "Review," or replying to any correspondence they may forward him.

We are at the request of a few friends, bringing out an Index to the first eight Nos of the "Review." Will those who would like to have one, kindly communicate the fact to us, as we do not want to print more than will be required.

# —THE— EARTH—NOT A GLOBE—REVIEW.



A Sectional View of the World as a Plane.

VOL. III. No. 6 (MONTHLY SERIES).

PRICE. 1D.

SEPTEMBER TO DECEMBER, 1896.

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. VII.

The following extracts are taken from Blair's Grammar of Philosophy. (p. 382-391, &c.):—

"The power of mutual attraction SUPPOSES that each of the two bodies pushes the other on their opposite sides, where the actor is not present, consequently not in force; for a body does not move except in the direction in which it is impelled. Nor, by a false analogy, do bodies *draw* one another, for there is no drawing-tackle between them."

"The power of mutual *repulsion* implies that each body is in force in a direction contrary to that in which each is moving, for each moves its own way, yet by repulsion is required to act the other way, though *each is moving from the other*, this is a contradiction."

"The power of *gravitation* in its alleged phenomena, that of *falling* bodies, is deemed a variety of attraction, which is essentially absurd, as the Earth does *not* push falling bodies on their remote side towards its own centre!"

"The power of *universal gravitation* first *assumes* a power of attraction between the heavenly bodies, which, as attraction, is absurd; and to this absurdity it adds [by supposition.—Ed.] a force not displayed in the bodies as matter of fact, since they do not fall together."

"THE PRETENCES TO PROVE THESE FANCIES, BY APPEALS TO ARITHMETIC AND GEOMETRY, ARE GROSS IMPOSTURES AND ARTFUL MYSTIFICATIONS."

"THE PROOFS PRETENDED TO BE DERIVED FROM GEOMETRY ARE ESSENTIALLY IRRELEVANT. GEOMETRY IS THE SCIENCE OF QUANTITY IN THE ABSTRACT, AND INVENTS NOTHING WHATEVER ABOUT POWERS AND QUALITIES. JUST SO IN MATHEMATICAL ANALYSIS; THE DATA MUST BE *ASSUMED*, AND THE RESULT DEPEND ON THE REASONABLENESS OF THE DATA, WHICH ARE QUITE INDEPENDENT OF THE MATHEMATICAL DEDUCTIONS."

"Newton, mistaking the cause of terrestrial weights, invented *universal weight*, disguising it by translation into *gravitation*; and then he was obliged to *invent* a second force, equally gratuitous and still more mysterious, to accommodate his first mistake to the phenomena of circular motion."

"Nature and geometry accord only in *mean points*. Every point is a mean in Nature, though it is not so in diagrams. Mistakes in this respect pervade Newton's *Principia*, and all the Scholastic Philosophy."

"Nothing can be more irrational than the hypothesis of a *FIXED* sun governing a *moving* system; nothing more trifling than the connection of the motions with the conic sections; nothing more absurd than a law for one of the bodies which does not obtain equally in the other, and, therefore, no appreciable law as to either; and nothing can be more incongruous than the hypothesis that the local generation of central force, as a necessary principle of aggregation in one planet, governs other distant bodies as a *universal force*!"

"The gratuitous theory of universal gravitation, which affords no data for any calculation, and demands concessions of faith about densities, &c., is utterly at variance with analogy."

(To be Continued.)

#### RIDICULOUS THEORIES.

"The theory that the sun is a great burning mass is as ridiculous as all scientific theories are."—Professor Bernstein.

### "ASTRONOMY MADE EASY."

Such is the heading of a series of papers which appeared in *Lloyd's Weekly Newspaper* from Aug. 9th to Oct. 4th, the writers being Sir Robert Ball, F.R.A.S.; Professor W. T. Lynn, B.A., F.R.A.S.; and Professor A. Fowler, F.R.A.S.

"Once, to every man and nation,  
Comes the moment to decide:  
In the strife of Truth and Falsehood,  
For the good or evil side."

—Notes and Queries, June, 1896, p. 125.

It was our intention to write a series of letters in reply to those appearing in *Lloyd's Newspaper*, but, as the Editor of "*Lloyd's*" did not insert the following letter, which was written in reply to the first one that appeared, or even manly enough to acknowledge its reception, we determined not to send any more for the *W. P. B.*, but to place our refutation of the teaching of these gentlemen on record in our own Journal. And as copies are sent to the British Museum, the readers there will be able to see the thread-bare state of the so-called "*most exact of the sciences*," and the cowardice of the Editors of the so-called "*Public Press*," "*The Free Press*," &c.

### THE TOTAL ECLIPSE OF THE SUN.

AUGUST 9TH, 1896.

To the Editor of *Lloyd's Weekly Newspaper*.

DEAR SIR,—The letter by Professor A. Fowler, F.R.A.S., appearing in your issue of August 9th, certainly does not make Astronomy easy, but exceedingly hard of belief! With your kind permission, and for the benefit of your numerous readers, I will prove this out, and in the interest of Good and Right and Truth, I trust you will insert this letter in your next issue.

First. Professor Fowler says, "the moon is a dark body." This, Sir, is not true! That is, if practical observation and undeniable facts are to be believed in preference to so-called "science teaching." Let us, then, with unbiased minds, test this statement by facts. (1.) If "the moon is a dark body," how was it that in the occultation of Jupiter by the moon (June 14th), Jupiter was seen through this "dark body," positively seen through the "mountains, craters, rivers, seas," etc., etc.? (2.) If "the moon is a dark body," therefore utterly devoid of any inherent light, how is it that, at a total eclipse of the moon, she is seen through the "earth's shadow" shining as brightly as ever? Surely a "dark body" cannot do that when its light-source is cut off. Impossible! (3.) If "the moon is a dark body," and only a reflector of sun light, where is the sense in calling it moonlight? (4.) If "the moon is a dark body," and a mere reflector of sunlight, why is it that the farther



she is away from the sun the brighter she shines? It is a demonstrable fact patent to anyone, that the farther away a reflector is from its light the duller is its reflection, while the nearer it is the brighter it shines. But the moon's light is less bright the nearer she is to the sun! Again, science, so-called, affirms that a reflector reflecting light reflects the heat of the light. Why, then, does the moon not reflect heat, seeing that modern astronomy asserts "the sun is the source of *all* heat and *light*?" This has been tested, and the test has irrefutably proved that the assertions made by teachers of modern theoretical astronomy are not founded in practical facts, but are the flimsy conjectures of their own making. The following extracts will suffice any honest enquirer:—

"The light of the moon, though concentrated by the most powerful burning-glass, is incapable of raising the temperature of the most delicate thermometer."—Dr. Noad, Lectures on Chemistry, p. 334.

"The moon's rays, when concentrated, actually *reduce* the temperature upon a thermometer more than eight degrees."—*The Lancet*, March 14th, 1856.

(5.) How can a body the diameter of which is only 2,200 miles eclipse a body the diameter of which is 887,076 miles? Professor Fowler says "for the best results (from observations of solar eclipses) the instruments must be equatorially mounted, and provided with clockwork, so that they may exactly follow the sun in its movement across the sky."

Why, Mr. Editor, what, in the name of commonsense and logic, does the Professor mean? Is it possible that he—that you—that the readers of your paper—do not see that Professor Fowler contradicts Sir Isaac Newton, and utterly overthrows the fundamental proposition of Modern Astronomy, which, in the third book of the Principia, is thus expressed—"The Sun is the centre of the Solar System and IMMOVABLE." Surely an *immovable sun* that requires to be "followed in its movements across the sky" is a curiosity which can only be seen by the "learned scientists" of the "enlightened 19th century." The earth is at last tacitly acknowledged by Professor Fowler, F.R.A.S., to be *stationary*, and the sun a *moving* body in the heavens! This is the justification and verification of the Zetetic contention and teaching! To assert that a thing is immovable, and at the same time to assert that it moves, is not only illogical, but the utter stultification of language! Surely Professor Fowler, if the world is a globe revolving before an *immovable sun*, so forming day and night as we were taught at school, the only clockwork essential for observing an eclipse of the sun or moon is the axial motion of the globe. To sum up, Mr. Editor, Professor Fowler has proved, up to the hilt, that the earth is not a revolving "oblate spheroid," a globe, but a vast irregular plane, with the sun, moon, and stars moving in their appointed pathways, at very moderate

distances from the earth. It is also proved that the moon does not eclipse the sun, for the moon is evidently a transparent body. And when stars of the 7th magnitude have been seen through it, surely it is only a reasonable and logical conclusion, confirmed by many observations, that the moon is no more the cause of the eclipse of the sun than the earth is the cause of an eclipse of the moon.

The belief in these "old wives' fables" is caused by school cramming in our unsuspecting childhood, ere we were capable of independent and right reasoning. And as the majority grow up their minds are set like steel according to the unshapely mould in which the teachers cast them. The ductility, vivacity, and ambition of youth is utterly crushed out of our children, and we find them mentally dwarfed, biased, weak, passive, dependent, servile, misinformed, therefore readily disposed to believe whatever interested and scheming men, reputed "great" or "learned," are pleased to tell them, and consequently resists every presentation of truth. As for Professors, Editors, Teachers and Ministers, the question with them is not always "What is truth?" but more often, Which is popular? *i.e.*, Which will pay?

Yours respectfully,

LEO CASTLE.

---

#### ORANGE POLARITY.

"The orange was originally a berry, and its evolution has been going on for more than 1000 years."—*Science Siftings*, January 9th, 1892.

Professor—"Explain the cause of the polar flatness of the orange."

Student—"We *suppose* that the early rudimentary orange, being 'a berry,' was freely suspended by its stalk, rotated on its axis, and thereby acquired a bulging at its equator and flattening at its poles. The modification—according to the 'laws of evolution'—was found to be an improvement, consequently it was permanently retained by 'natural selection,' and now propagates its species according to the 'law' of the 'survival of the fittest' astronomer who wrote such nonsense."—*Balaam's Ass*.

---

"TRUTH IRRITATES THOSE WHOM IT ENLIGHTENS BUT DOES NOT CONVERT."

"Objects seen from a balloon always seem at least five times smaller than do the same sized objects when looked at horizontally from the earth at the same distance—say from one mile high and one mile along the earth's surface."—Airopaidia: by Thos. Baldwin, Esq., M.A.

## THE LARGEST GLOBE ON EARTH.

It is proposed to erect in London a terrestrial globe having a *diameter of eighty-four feet*, and showing the earth's surface on a scale of about eight miles to the inch. At Paris, in 1889, a globe was exhibited, but this one will be double the diameter, and upon it every geographical feature of importance will be shown and named, as will also be every city or town having 5000 inhabitants, besides a large selection of others with a smaller population. The larger cities will be drawn to scale. *London* will cover a space *rather larger than that of a penny*.

The idea of the big globe just described is that of Mr T. Ruddiman Johnston, F.R.G.S., who has developed a process by which the globe can be constructed in two years. In the making of the globe *he hopes to have the views of all those having a special knowledge of any portion of the earth's surface*, and will confine his labours to systematising the information supplied, organising a staff, and guiding it towards the satisfactory completion of the globe. The President of the R.G.S. approves of this scheme, "Daily News," July 9th, 1896.

DEAR SIR—Having read in the *Daily News* of July 9th. that you have an idea of erecting in London, a "terrestrial globe," I write, seeing you "hope to have the views of all those having a special knowledge of any portion of the earth's surface," to inform you that a "globe," no matter to what scale it may be constructed, is not in any sense a representation of any portion of the earth's surface according to nature. This can be proved by practical investigation.

It is an undeniable and manifested fact in nature, that neither the Sun, Moon or Stars even disappear (set) *BELOW a tangent line*, no matter what height the phenomena be viewed from.

That one absolute fact alone Sir, is the utter annihilation of the teaching of Modern Astronomers and Geographers that we are living on a ten-motioned, Dutch-cheese-shaped sea-earth-globe.

Again, Sir, the science of hydrostatics absolutely refutes the teaching that the earth's surface is curved. To go no further, in the "English Mechanic," June 26th, 1896., we read :—

### LEVEL OF THE SEA.

Since *any* given body of Water . . . . MUST HAVE A LEVEL SURFACE *id est* NO ONE PART HIGHER THAN ANOTHER\*, and seeing that all our oceans (a few inland seas excepted) are connected together, it follows that *they* ARE ALL VIRTUALLY OF THE SAME LEVEL."

\* This writer in the E.M. asserts that no one part of water can be higher than another. Is this *absolutely true*?

Is this not an unequivocal proof that the earth is a vast irregular plane?

If you can forward me *any* proof that the earth is a twirling globe I shall be very pleased to consider, and courteously reply to it.

I remain, dear Sir,

Yours respectfully,

JNO. WILLIAMS, *Hon. Secy.*

Universal Zetetic Society,

32 Bankside, S.E.

T. Ruddiman Johnson, Esq., F.R.G.S., 24 Pall-Mall, S.W.

P.S.—One other question occurs to me to ask. Will your "big globe" when on view have axial, orbital, or in fact *any* of the *ten* motions it is said to possess?

Of course those who desire to truthfully represent nature in any of its parts, should not leave out any part or fact absolutely connected with it, or consequently a *misrepresentation* will be presented, and you, sir, would not be guilty of that I feel quite sure.

In the First Principles of Natural Philosophy, by W. T. Lynn, Esqr., B.A., F.R.A.S., we read the following :—

"The upper surface of a fluid at rest . . . is a horizontal plane, since otherwise, if a part of the surface were higher than the rest, those parts of the fluid which were under it would exert a greater pressure upon the surrounding parts than they received from them, so that motion would take place amongst the particles and continue until there were none at a higher level than the rest, that is, until the upper surface of the whole mass of fluid became a horizontal plane." Is this *absolutely true*?

Dr. Lardner in his "Natural Philosophy" says :—"A liquid surface when at rest will always assume the form of a horizontal or level plane." Is this absolutely true?

Now, gentlemen of the R.G.S., will you please tell us if Professor Alfred R. Wallace, F.R.G.S., Doctor M. W. B. Coulcher, and the late Editor of "The Field," Mr J. H. Walsh, said what was *absolutely true*, when they declared that the water midway between Old Bedford Bridge and Welney Bridge was *five feet* HIGHER than at the Bridges?

I take the pleasure of forwarding you a copy of our Journal for July, 1895.—JNO. W.

*To the Editor of the Daily News.*

DEAR SIR,—I see by your issue of July the 9th that T. Ruddiman Johnston, Esqr., F.R.G.S., hopes to have the views of *all those having a special knowledge of any portion of the earth's surface*, therefore I have forwarded him mine, and herewith send you a copy of my letter to him for insertion in your columns, for the subject is one of general public interest. With thanks in anticipation of insertion.—I remain,

Yours obliged,

JNO. WILLIAMS.

The Editor of the "Daily News" did not insert our Secretary's letter. We suppose he was afraid lest the eyes of the public should be opened, and the fraud imposed upon them in their unsuspecting childhood should be made manifest! A so-called science that has to hide itself in silence is certainly not worth much, if anything at all.

"The reptile Press of Europe,  
That sell their tainted wares,  
Have earned their dirty wages—  
And much our England cares!  
Shall we renounce our birthright  
To lay the tyrant low,  
Because the men whom money buys  
Gnash teeth, and mutter "No?"

The following is a copy of a note sent by a friend.

HON. SIR,—Seeing the notice of your proposed model (Theoretical) Globe, and that many opinions by public men have been tendered on the usefulness or otherwise of the object, I thought it good to remind you, there is a large body of thinkers represented by the "Universal Zetetic Society," who will gladly welcome the appearing of the Model, on account of the rare opportunity it will afford them of publicly exposing and bringing into disrepute the "Premiss of *all* Theoretical-Elementary-Science" (so-called).—Yours faithfully,

H. H. D'ARCHY ADAMS.

RUDDIMAN JOHNSTON, ESQ., F.R.G.S.,  
24 Pall Mall, S.W.

P.S.—I enclose a small brochure, etc., on the Zetetic side for your perusal and future reference.

### THE EARTH'S ROTUNDITY.

To the Editor of the "Morning Herald."

Will you kindly oblige two of your young readers by informing them in how many ways has the earth been proved to be round (a globe)?

LAUREL, June 15.

M. B. T.

[In three ways—by experimenting along straight stretches of water, where a point midway between the beginning and the end was found not to be in the same horizontal plane with points at the beginning and the end: by the fact that at sea the upper sails of an approaching vessel are seen first, and not the hull and by the shadow of the earth on the moon, when the latter is eclipsed, the shadow being round.]

### FLAT-EARTH PHILOSOPHY.

To the Editor of the "Morning Herald."

Your remarks in to-day's issue anent "The Earth's Rotundity" are utterly misleading. They will help the cause of a "Plane Earth" in every thoughtful mind. Why not go to the top of the curve and look in all directions? Your observer is uniformly on the one side of the top of the earth! (2) Do you mean to say that a ship of, say 100 feet elevation, can be seen coming *up* or going *down* over a globe 25,000 miles in circumference? Has perspective nothing to do with it? (3). And as to the shadow of the earth on the moon, why, the moon has many times been eclipsed before sunset!

No, sir; the globular theorists have not a leg to stand upon.

WILLIAM CARPENTER.

### THE GULF STREAM.

To the Editor of the "Morning Herald."

Can you inform a reader of your paper whether there is a scientific explanation of the cause of the Gulf Stream.

[There are several theories to account for the Gulf Stream. One is that the motion of the earth causes the water, which is more mobile than the land, to pile up, as it were, in the Caribbean Sea, from which it flows out around the Florida peninsula, the motion of the earth keeping the current near the Atlantic Coast. The Gulf Stream has been a fruitful subject of speculation and there are many theories as to its cause.]

### CAUSE OF THE GULF STREAM.

To the Editor of the "Morning Herald."

Without for a moment presuming to know the cause of the Gulf Stream, one thing, at least, must be eliminated from the whole business

of *theoring* in the matter, and this is that the earth's "axial rotation" or "orbital revolution" can have anything whatever to do with the phenomenon, and this for the reason that the scientists have *no evidence that the earth is a globe*, and, therefore, cannot speak of "the motion of the earth."

BALTIMORE, June 21.

WILLIAM CARPENTER.

Consequently they know nothing whatever about *the cause* of the Gulf Stream!—ED. E.R.

### PROFESSOR W. CARPENTER DEAD.

"Prof. William Carpenter died at his home, 1316 N. Central Avenue. Since coming to Baltimore, sixteen years ago, Mr. Carpenter has written much and lectured often on the subject of "the Earth not a Globe." He was accustomed to travel around to talk about it, and when people would not buy his 100 Proofs that the Earth is not a Globe, he would present them with copies in order that they might not be deprived of the opportunity of learning that the astronomy now being taught is all *upside down*. He was always thoroughly in earnest, patient and diffuse in his method of presenting his views, and angered only when people refused to give him a hearing. He was often to be found in front of John Hopkins' University, the City Schools and schools in other cities, waiting to talk to the students as they came out upon his special subject.

His death was due to a stroke of apoplexy on Sunday, August 30th. A widow, two sons, and three daughters survive him."—*The Sun*, Baltimore, Sept. 2nd, 1896.

On another page will be found (so far as we know) his last communication to a newspaper.

#### IN MEMORIAM.

It is with profound regret that we announce the death of our esteemed and invaluable friend,  
**WILLIAM CARPENTER.**  
 Born at Greenwich, 1830. Died at Baltimore, U.S.A., at 9 o'clock A.M., Sept. 1st, 1896, aged 66 years.

We knew, and lov'd thee,  
 We well knew thy worth.

### ANSWERS TO CORRESPONDENTS.

All letters to the Editor should be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. The Editor does not hold himself responsible for the opinions expressed by correspondents. All letters *must* be prepaid and addressed to

"EXCALIBUR,"

c/o Mr. J. WILLIAMS,

32, Bankside, LONDON, S.E.

C. HARPUR asks—"If the moon is a semi-transparent crystalline body, *why* does it so completely obscure the sun when it eclipses the sun?" We commend to him the careful perusal of "Astronomy made Easy." Evidently your eyesight is affected, as many of us have stood on Old Bedford Canal Bridge and seen Welney Bridge and objects far beyond it. This also accounts for your not being able to see the steeple of St. Botolph Parish Church at the stated distance. Thanks for your reply to the questions asked Mr. Redfern Kelly, F.R.A.S. You have rushed in where he dare not tread, thus fulfilling the old adage!

REV. D. NIELD.—Thanks for the *Islington Gazette*. Whatever "literalists" may teach, we are not aware that any Zetetic would be so foolish as to assert that when Christ said "I am the door of the sheep," He meant he was a literal door of wood, painted and varnished, with a handle, lock, key, and brass knocker on. Such an interpretation is akin to blasphemy, and deserves the righteous contempt of every Christian. We should like to know what such Scriptures has to do with either a globular or plane earth. But why quote Psalm xix. 4-6. Is it true, *literally true*, that the sun "does not get to an end, it does not *stop* when it gets to the West, but *continues its race*, making its circuit." Then, the sun does actually move? Joshua was right, then, when he, in the power of inspiration, said, "Sun, stand thou still." Sir Isaac Newton, then, has led the world to believe a lie, has he not? He, in *The Principia*, says the sun is "IMMOVABLE." Surely it is against all reason and logic to assert that an IMMOVABLE object *moves*. Sir W. Herschel, by his "discovery of the MOTION OF THE SUN towards the constellation Hercules," shook the very foundation of Modern Astronomy, and thereby proved that the pretty pictures of "concentric circles" are utterly untrue, being merely conjectures to bolster up foregone conclusions deduced from purely speculative premises.

### TO OUR READERS.

DEAR FRIENDS,—We regret to state that our efforts to issue this Journal Monthly has not met with the response of our friends as it should have done, therefore in future it will be issued once a Quarter. A New Cover will be selected, and it will be conducted by "EXCALIBUR." Price 3d. post free. It will not necessarily be issued on the First or Second Months of the Quarter—that will depend upon the funds in hand.

With our next issue we shall enclose to those whose Subscriptions are due a printed notice to that effect, and we trust that our friends will remit at their earliest moment, as our funds are very low. Those who do NOT respond to the "Second Notice," we must consider as having withdrawn from the Society. Therefore, if you cannot send the full amount of your Subscription, send what you can. See 2 Cor. viii. 12.

## CONTENTS OF OUR LETTER BOX.

Halifax.

DEAR LEO CASTLE,—I am glad to hear of the American experiments proving "Parallax" right, as they must of necessity, for truth is unchangeable and P. was certainly right in his determination of Earth's position and water level, *i.e.* horizontal. I can't help but feel regret that our old friend and champion, Carpenter, has passed from our midst. I shall ever respect his memory as one who loved the truth as he found it in the word of God and in Nature. Let him have a place in our next issue, and our sympathies as a society deeply expressed to the bereaved widow and family. He was a practical, consistent, constant and enthusiastic Zetetic. Would to God there were thousands like him. [Here, here, Ed.] Kindest regards, from all to all, hoping soon to see you.—Yours as ever,

JOHN SMITH.

The American experiments referred to will appear in our columns as soon as possible.—ED.

DEAR SIR,—I was indeed most sorry to hear of Mr Carpenter's death. We were early friends of the Zetetic cause, and it never had a more sterling or a cuter critic than he. His book "Common Sense" on Astronomy as a piece of negative criticism has never had, and probably never will have, an equal much less a superior. JAMES NAYLOR.

DEAR SIR,—I sincerely hope the *Earth Review* will continue to appear monthly. The quotations in the Articles on Gravitation are very valuable. The letters, "declined with thanks," &c., are also very interesting. Newspaper editors are

evidently afraid to assist in the exposure of the forlorn condition of modern astronomy by publishing them. How much longer are our great "Scientists" going to keep up the farce of pretending to be united in opposing all anti-Newtonian views? "Parallax" refers to the "smouldering scepticism" which they have induced in the hearts of Christian and Jewish believers, but it may well be perhaps that, although not condensed to their opponents, or even to each other, this same "smouldering scepticism" actually exists deep down in THEIR OWN HEART. The damaging admissions and confessions made by some of the more candid and honest amongst those who are considered to be in the front rank of "Science," which the *Review* so usefully brings to the notice of the public from time to time, indicate the dry rot of long standing which (because mostly hidden from, and therefore not suspected by, the latter) works silently and inevitably to the coming great revolution in science which is probably nearer than any have imagined, when this lying and monstrous system of astronomy, impudently labelled "the most exact of the sciences," will collapse all along the line—suddenly, and without remedy! The sneers and defiance hurled by them at those who maintain the Planeist truths are thus by no means to be considered as the measure of *failure* of the work of the Zetetic Society in undermining the astronomical "articles" of Newtonian "faith." How often does seeming failure and defeat turn out to be victory—*absolute and complete*—AFTER ALL!

JOHN BRADLEY.

## EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec., post free, to any address in the postal union for 1s per year, in advance.

All monies for the Society must be paid direct to the local Vice Secretaries, or direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Sumner Street, S. E.

—THE—

## EARTH-NOT A GLOBE-REVIEW.

SIX MILES.



"Parallax" proving the Surface of Water to be Horizontal.

Vol. IV.

Jan. - March / 1894.

## HORIZONTALITY DISPROVES CONVEXITY.

The *practical demonstrations* of "Parallax," the founder of Zetetic Astronomy, were no hole and corner doings. Many similar experiments have been made by others over canals, rivers, seas, etc., in various parts of the world, and all confirm the fact, the surface of all standing water, or water at rest, is horizontal.

ERGO.

The world is *not* a rotating globe and we living on the outside held on by "gravitation," neither is it an "hollow sphere" and we live inside of it on a concave surface.

The various systems of theoretical science, viewed either from a common sense, a practical, or a Scriptural standpoint of criticism, prove themselves by their own self-stultifications and contradictions to be utterly untrue! And the only object of exponents appears to be nothing more or less than self-aggrandizement. Their silence when challenged for proofs of their theories proves the fallaciousness of their teaching and their consciousness of the fact.

Preachers, lecturers, and all intelligent and practical men in the world should be interested in this discussion. Ignorance of real facts is a disgrace to our pretended civilization and a slur upon our Christianity, and can only be obliterated by an honest and candid yielding through practical investigations to the claims of the voice of God in Nature. This mode, and this alone, will, or can strictly accord with and confirm the utterances of Holy Writ, proving thereby that the God of Nature is the God of the Bible, and that they are the voice of the Lord our God speaking unto us, and teaching us His Truth.

## CONTENTS OF OUR LETTER BOX.

Halifax.

DEAR LEO CASTLE,—I am glad to hear of the American experiments proving "Parallax" right, as they must of necessity, for truth is unchangeable and P. was certainly right in his determination of Earth's position and water level, *i.e.* horizontal. I can't help but feel regret that our old friend and champion, Carpenter, has passed from our midst. I shall ever respect his memory as one who loved the truth as he found it in the word of God and in Nature. Let him have a place in our next issue, and our sympathies as a society deeply expressed to the bereaved widow and family. He was a practical, consistent, constant and enthusiastic Zetetic. Would to God there were thousands like him. [Here, here, Ed.] Kindest regards, from all to all, hoping soon to see you.—Yours as ever,

JOHN SMITH.

The American experiments referred to will appear in our columns as soon as possible.—ED.

DEAR SIR,—I was indeed most sorry to hear of Mr Carpenter's death. We were early friends of the Zetetic cause, and it never had a more sterling or a cuter critic than he. His book "Common Sense" on Astronomy as a piece of negative criticism has never had, and probably never will have, an equal much less a superior. JAMES NAYLOR.

DEAR SIR,—I sincerely hope the *Earth Review* will continue to appear monthly. The quotations in the Articles on Gravitation are very valuable. The letters, "declined with thanks," &c., are also very interesting. Newspaper editors are

evidently afraid to assist in the exposure of the forlorn condition of modern astronomy by publishing them. How much longer are our great "Scientists" going to keep up the farce of pretending to be united in opposing all anti-Newtonian views? "Parallax" refers to the "smouldering scepticism" which they have induced in the hearts of Christian and Jewish believers, but it may well be perhaps that, although not condensed to their opponents, or even to each other, this same "smouldering scepticism" actually exists deep down in THEIR OWN HEART. The damaging admissions and confessions made by some of the more candid and honest amongst those who are considered to be in the front rank of "Science," which the *Review* so usefully brings to the notice of the public from time to time, indicate the dry rot of long standing which (because mostly hidden from, and therefore not suspected by, the latter) works silently and inevitably to the coming great revolution in science which is probably nearer than any have imagined, when this lying and monstrous system of astronomy, impudently labelled "the most exact of the sciences," will collapse all along the line—suddenly, and without remedy! The sneers and defiance hurled by them at those who maintain the Planeist truths are thus by no means to be considered as the measure of *failure* of the work of the Zetetic Society in undermining the astronomical "articles" of Newtonian "faith." How often does seeming failure and defeat turn out to be victory—*absolute and complete*—AFTER ALL!

JOHN BRADLEY.

## EDITORIAL NOTICES.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec., post free, to any address in the postal union for 1s per year, in advance.

All monies for the Society must be paid direct to the local Vice Secretaries, or direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Sumner Street, S. E.

—THE—

## EARTH-NOT A GLOBE-REVIEW.

SIX MILES.



"Parallax" proving the Surface of Water to be Horizontal.

Vol. IV.

Jan. - March / 1894.

## HORIZONTALITY DISPROVES CONVEXITY.

The *practical demonstrations* of "Parallax," the founder of Zetetic Astronomy, were no hole and corner doings. Many similar experiments have been made by others over canals, rivers, seas, etc., in various parts of the world, and all confirm the fact, the surface of all standing water, or water at rest, is horizontal.

ERGO.

The world is *not* a rotating globe and we living on the outside held on by "gravitation," neither is it an "hollow sphere" and we live inside of it on a concave surface.

The various systems of theoretical science, viewed either from a common sense, a practical, or a Scriptural standpoint of criticism, prove themselves by their own self-stultifications and contradictions to be utterly untrue! And the only object of exponents appears to be nothing more or less than self-aggrandizement. Their silence when challenged for proofs of their theories proves the fallaciousness of their teaching and their consciousness of the fact.

Preachers, lecturers, and all intelligent and practical men in the world should be interested in this discussion. Ignorance of real facts is a disgrace to our pretended civilization and a slur upon our Christianity, and can only be obliterated by an honest and candid yielding through practical investigations to the claims of the voice of God in Nature. This mode, and this alone, will, or can strictly accord with and confirm the utterances of Holy Writ, proving thereby that the God of Nature is the God of the Bible, and that they are the voice of the Lord our God speaking unto us, and teaching us His Truth.



## THE OLD BEDFORD CANAL AND SOME THINGS THAT CAN BE SEEN THERE.

We think that even the most ardent believer in a plane earth will admit that the results of the Wallace-Hampden experiments, superficially viewed, were unsatisfactory. However much, when examined beneath the surface, they proved standing water to be horizontal, on the face of it they appeared to prove otherwise. The distant signal undoubtedly seemed below the nearer one, and as this appearance in some form or other would be the case with a globular earth, evidence for the latter appeared clearly to be established. Even we, who at the time critically reviewed the experiments to prove the fallacy of the conclusions arrived at, felt that the cause of the appearances was not a matter of certainty, but only one of conjecture and probability. It was therefore with readiness that we accepted a kind invitation in August, 1894, to take part in some experiments on the Old Bedford Canal, of Wallace-Hampden fame. The experimental party was well provided with numerous instruments, including a surveyors theodolite, Dumpy level, telescopes, &c. The results clearly established to all present that the surface of the water in the Old Bedford Canal at any rate does not decline in any part of its course from a right or horizontal line starting from the point of observation, and therefore that standing water is not convex but horizontal. With the general results of the experiments we are, however, at present not so much concerned as with some particular ones in which we more intimately participated. It is a description of these which we now propose to lay before the readers of the "Earth Review."

At the time of the experiments it was unfortunate that the weather during the whole of our four days' stay was unsatisfactory. It was only during brief spells of fairly bright weather that any experiments could be made at all, and it was upon one of these occasions that the following phenomena bearing upon the Wallace-Hampden experiments manifested themselves. We had been using a terrestrial telescope, and found that when truly levelled from the parapet of the Old Bedford Bridge, Welney Bridge, six miles distant, always appeared in or near the centre of the field of view. In fact it required a distinct variation from the level to make Welney Bridge appear in the lower part of the field, and as would be the case if the Old Bedford Canal was part of a globe of some 4000 miles radius. Having, by repeated experiments, verified the statement just made, we turned our attention to the surveyor's theodolite. This was a truly grand instrument, possessing levels for both the transverse and longitudinal directions, together with vertical and horizontal cross hairs similar to the instrument used by Professor Alfred Russell Wallace.

We levelled the theodolite in the direction of Welney Bridge, and were at once struck with the fact that the bridge appeared considerably below the horizontal cross-hair in the field of view, showing the same peculiarity, in fact, as the instrument used by Professor Wallace. But this was not all, for we further noticed that different positions of the instrument gave seemingly different distances of the bridge below the centre. In every position the instrument was truly levelled in the direction of Welney Bridge, yet the seeming distance of the bridge below the centre constantly varied. While repeating our experiments, with a view to discovering the cause of the variation, we were suddenly startled to find that in a new position both the phenomenon and its several phases vanished altogether, and Welney Bridge, instead of appearing below the cross-hair, now appeared considerably *above* it, just as truly as the most enthusiastic Zetetic could wish! We looked at our level, thinking we had made some error, but no, that was all right, and yet the very contrary of what was seen by Professor Wallace was manifest, namely, Welney Bridge, which is 4 feet lower than the Old Bedford Bridge, appeared above the cross-hair and not below it. Of course we repeated our experiments, and found that no two positions ever gave the same results; sometimes the bridge appeared above and sometimes below the cross-hair, but the amount of the variation was never constant. Yet the cause of this variation was a very simple one. Hitherto we had confined our attention to merely levelling longitudinally—that is in the direction of the view—and not transversely. But as soon as this latter was attended to, the irregularities disappeared. Then the view of Welney Bridge, when the theodolite was truly levelled in both directions, appeared generally a little below the cross-hair, and as, in fact, it ought to do, being 4 feet lower. By very slight, indeed, almost imperceptible, variations in the level, the apparent relationship of the bridge to the cross-hair could be very considerably altered, and the manner in which the former, whether seemingly above or below the latter, darted to the other side as it approached it, was very striking. That this behaviour should manifest itself was not to be wondered at, for as the cross-hair occupied the actual centre of the telescopic axis, it is evident that rays from a distant object must seem to be deflected from their true position by having to pass under or above the cross-hair, and form upon an axis otherwise than the actual one. The apparent position, therefore, of all objects that are at or near the true centre when viewed in a theodolite can *never be the real one!*

But besides the appearances above stated, there were others which we must not omit to mention.

Foremost of these is the appearance of the whole length of the

canal from the point of observation to the distant object. Far from the canal appearing to go down hill from the spectator, as would be the case if the earth were a globe, it was just the reverse. It appeared to rise towards the distant object as if the water was actually running uphill. This peculiarity was even much more striking in the theodolite than in the telescope. In the former it almost had the appearance of a wall of water fronting the spectator, and its effect was somewhat startling when looked at for the first time.

But far more important than this matter is the one we have now to relate. In viewing Welney Bridge we had noticed a dark band of uniform breadth above the parapet or highest part of the bridge and separated from it by a narrow streak of light. Both the band and the light appeared to be cut off by the objects on each side of the Canal. What this dark band and streak of light betokened was for sometime a mystery. On enquiry, however, the dark band proved to be the appearance presented by a railway bridge belonging to the Great Eastern Railway Company that crosses the Canal some six miles *beyond* Welney Bridge, or 12 from Old Bedford Bridge, the point of observation. The streak of light simply represented that portion of space underneath the railway bridge that was not excluded from observation by the bridge at Welney in the more immediate foreground. The striking character of the phenomena, and the accuracy of the information imparted to us, was greatly demonstrated when presently a train of carriages crossed the bridge. Then the band suddenly appeared to be more than double its breadth, the upper part became broken and irregular, with its conformation quickly changing as the varying heights of the carriages manifested themselves. Besides these features, vertical streaks of light anon appeared, corresponding to the spaces between the carriages as these passed rapidly over the bridge. It did not take long to estimate the importance of what we had seen, for here were the Wallace-Hampden conditions over again, only on a far better and more positive scale. Where we stood was Old Bedford Bridge, the point of observation. Welney Bridge in the intermediate distance corresponded to Wallace's middle signal, and the railway bridge at the further distance represented the more distant one. We only needed the heights of the various bridges for a conclusive demonstration upon one side or the other. The highest points of Old Bedford and Welney Bridges were found by us to be 17ft. and 13ft. respectively; whilst the Great Eastern Railway, in a letter to us dated August 31st, 1894, kindly gave us the height of their railway bridge as 19ft. to the top of the girder, and 15ft. to the underside. Now, if the Old Bedford Canal represents comparatively a plane surface, we should expect that, when looking from the parapet of the

Old Bedford Bridge in the direction of the Great Eastern Railway Coy.'s bridge, Welney Bridge would appear lower than either of the former, from the fact that it is lower really, its parapet being 4ft. lower than Old Bedford Bridge and 2ft. lower than the underside of the railway bridge. It follows, therefore, when looking from the former to the latter, that not only would the girder, 4ft. broad, be fully visible, but a clear space of light below it would also be apparent. And such was actually the case. Given the necessary condition of a clear atmosphere, and there, from Old Bedford bridge, can be seen the railway girder and the clear space below it appearing distinctly above Welney Bridge in the middle of the field of view. But if the earth were a globe of 4000 miles radius this would be impossible. The utmost that would be included in the field of view would be anything above a line prolonged from Old Bedford Bridge over Welney and beyond. But this line at the latter bridge would only be 28ft. lower than a tangent from old Bedford, and 56ft. lower if prolonged to the railway bridge. This line, however, would then be still 21ft. above the highest point of the latter bridge, and, as a necessary consequence, place it entirely out of the field of view. We must further add, that the case becomes much worse if a lower point of observation is taken. During these experiments the railway bridge was distinctly seen underneath the arch of Welney Bridge from a boat, the elevation of which was about 2ft. 6in. above the canal at Old Bedford. Now, in this case, the lowest boundary of the field of view would touch the water about two miles from the point of observation, and if prolonged to the railway bridge, would be 47ft. above the highest point of the latter.

But *cui bono?* Why pursue the subject further? There are only two possible standpoints against the foregoing statements of fact—either to deny them, or, admitting them, to boldly accept the necessary conclusions. To those who take up the first position we make no appeal, for knowing we have truly stated what we saw, we can only view those who disbelieve us with pity for their scepticism. To those, however, who accept the second standpoint, we say—Never mind the sneers of opponents, but boldly embrace the conclusion, and to the best of your power proclaim them.

JAMES NAYLOR.

[And, if possible, go and see the facts here recorded for yourselves.—ED.]

“We say that we see stars (referring here to the observation of celestial bodies); but we do not see the stars in such a way as to distinguish whether they be round or square, smooth-surfaced or irregular. In fact, while we see them, we can know nothing of them visually, excepting that they exist.”—SCIENCE SIFTINGS, June 9th, 1894.

## THE EARTH NOT CONVEX, NOR CONCAVE.

AN AUTHENTIC EXPERIMENT PROVING MODERN ASTRONOMY AND  
KORESHANITY TO BE GIGANTIC FALLACIES.

"Some endeavour to concede to us the non-convexity of inland waters, while holding that the oceans are convex. It is evident that astronomers of recognized ability are not so illogical as that, for *known laws of statics* for still fluids compel them to admit that *all* waters would necessarily be convex if the earth were rotund; and on the other hand, the inevitable conclusion is, if water is found to be *not* convex, then, we are living upon some other form of earth than a convex globe. And this is the issue, as embraced in the law of hydrostatics, or the principles relating to the pressure and balance of fluids. We do not deny these static laws, for they are the *basis* of terrestrial science, and concerning these we quote as follows from Wm. J. M. Rankine, Civil Engineer, F.R.S.S.A. :—

"Pressure and Balance of Fluids.—The necessary consequence of that property (of liquids) is the following principles, which are the foundation of the whole science of hydrostatics. (1) In a perfect fluid when still, the pressure exerted at a given point is normal to the surface upon which it acts, and of equal intensity for all positions of that surface. (2) The surface of equal pressure in a still fluid mass is everywhere *perpendicular* to the direction of gravity—that is, horizontal. Definition of Horizontal.—A HORIZONTAL SURFACE IS A SURFACE WHICH IS EVERYWHERE AT RIGHT ANGLE TO THE DIRECTION OF THE FORCE OF GRAVITY. *SUCH IS THE SURFACE OF A PIECE OF STILL WATER.*"

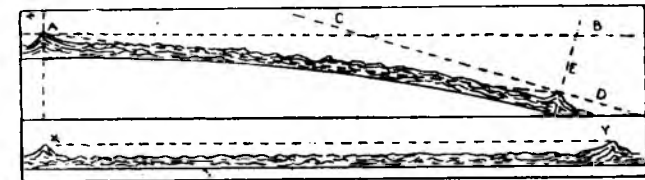
Proctor evidently recognised that the issue rested here; and the way he consoled himself in referring to attacks upon the Copernican system, was in *denying* the testimony of experimentalists concerning the non-convexity of the water's surface. Hence, he said in his "Myths and Marvels of Astronomy," page 280.

"Of course, if Parallax had, with his eyes a few inches from the surface of the Bedford Canal, seen an object close to the surface six miles from him, there manifestly would have been something wrong in the accepted theory about the earth's rotundity."

Upon Proctor's own admission it only remains, in order to convince honest and consistent astronomers, to prove to them that *water is not convex*. This we can do if they will condescend from peering skyward concerning which they know nothing, to test the surface of water, concerning which they *can know*! It has been demonstrated beyond doubt

by the sea horizon, by experiments on Bedford and Erie Canals and Lake Erie, and other waters, and by the *datum lines* adhered to in the construction of the Suez Canal in Egypt and the Manchester Ship Canal in England, as well as by the Standing Order of the English House of Lords and Commons forbidding allowance for calculated convexity of the earth in public works. . . .

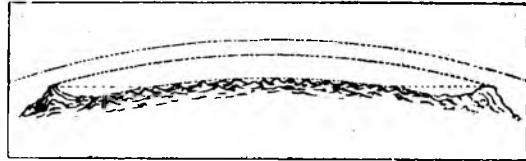
There are those who are not satisfied with these proofs; they doubt if experiments upon six or even ten miles' distance is sufficient to demonstrate the fallacy of modern astronomy. To such, and to those who may deny the evidence of competent experimentalists . . . we have to offer an *authoritative* and *noted experiment* over a long stretch of 183 MILES. Had the experiment been made by a Zetetic his report would have been laughed at and considered as unworthy of notice, but coming as it does from the Signal Corps of the U. S. Army, and on record in Washington City, no sane man will dispute it. The particulars of this experiment were published and illustrated in *Harper's Weekly* of Oct. 20th, 1894, from which we take the "profile" illustration below. The experiment was conducted with the Glassford Flash-Light or Heliograph. The signal stations were Mt. Uncompahgre in South-Western Colorado, and Mt. Ellen in Southern Utah; the former 14,418 ft. above sea level, the latter 11,410 ft.; the plateau lying between the two stations is 7,000 ft. higher than the sea. According to the calculated rate of curvature of a spherical body 25,000 miles in circumference, a straight line (A B) running at *right angle* with the *perpendicular* at the transmitting station,



Mt. Uncompahgre (A) would run as a *tangent* from the line of curvature, so that in the distance of 183 miles, the curvature would place Mt. Ellen *downwards* from the tangent line, *below* the line of vision, *nearly 6 miles!* and yet the receiving station was seen on a *level with the eye* from Mt. Uncompahgre, on a line *coincident with the "tangent" line!* Do you know what the *accepted* law of perspective would demand in order that Mt. Ellen be seen on a line of vision coincident with the horizontal tangent from Mt. Uncompahgre? It would require that the space of 6 miles be reduced to a *vanishing* point, which would place the point of intersection of the tangent and B with the oblique (?) perpendicular E, 3000 (diameters)  $\times 6 = 18,000$  miles from A! It is difficult enough for us to demonstrate to some minds how Mt. Ellen (height 4,000 ft.

above the plateau) is reduced almost to a vanishing point, and brought up to an apparent level with the height of 7,000 ft. above plateau (as in figure in lower part of cut) without dipping Mt. Ellen *downwards* 6 miles *below the line of vision*! Refraction? Yes, but it would apparently elevate Mt. Ellen only *one-tenth*, leaving 5 miles yet unaccounted for.

Take another view: If we admit even that the two stations be looked upon as being connected by a *straight line* upon a spherical body (which could not be at *right angle* with the perpendicular of either station; and does the earth curve *upwards* and *then downwards* from starting point or downwards continually?), there would be (as in the following diagram reproduced from *Harper's Weekly*, a *BUGLE OF SOLID EARTH NEARLY 70 MILES LONG EXAGGERATED PROFILE OF THE COUNTRY,*



Showing the two Peaks actually hidden from each other by the Curvature of the Earth's Surface.

AND OVER 5,000 FT. *HIGHER* THAN THE TOPS OF THE TWO MOUNTAINS TO RENDER THEM *INVISIBLE* and "*HIDDEN FROM EACH OTHER.*" The transmitting station *was seen* in clear sunset light, and the message was flashed successfully from Mt. Uncompahgre to Mt. Ellen, and transmitted by telegraph from thence to Washington City! How is this? Will you deny it? It is substantiated by the U. S. Signal Corps; the distance, rate of curvation and height of mountains can be had from any standard geographical work. Will you explain it? Then do so, taking for a basis of explanation *facts* which can be proven, and then harmonise your configuration with the Bible. Until you do this you cannot say that at least *this proof* is "very silly nonsense, and utterly unworthy of notice!"

This heliograph experiment speaks out in thunder-tones against the fallacy of the modern scientific system, and *utterly overthrows* the boasted accuracy of present day astronomy and geodesy! The truths of nature assert themselves in corroboration of the Bible cosmogony!

The proofs offered by "Parallax" that the earth is not convex—that we do not live upon a rotund surface, are conclusive and irrefutable.—Extracts from *The Herald of Glad Tidings*, No. 14.

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. VIII.

The following extracts are taken from "*A Million of Facts.*" By Sir Richard Phillips:—

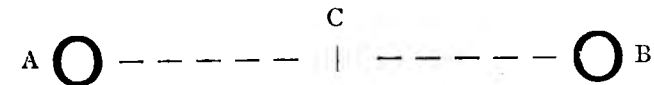
"If the sun has any power, it must be derived from motion; and if acting on bodies at a distance, like Jupiter on his moons, or the Earth on its moon, THERE *MUST BE AN INTERVENING MEDIUM TO CONDUCT ITS MOMENTUM THROUGH ITS SYSTEM.*"

"It is a principle never to be lost sight of, that circular motion is a necessary result of equal action and reaction in contrary directions; for the harmony would be disturbed by variation of distance, if the motion were rectilinear. The same action and reaction are therefore only to be preserved by reciprocal circular motion. NO ATTRACTION AND NO PROJECTILE FORCE ARE THEREFORE *NECESSARY.* THEIR *invention must be regarded AS BLUNDERS OF A SUPERSTITIOUS AGE.*"

"If the bodies came near while moving THE SAME WAY, there would be no mutual REACTION, and they would go together for want of reaction, and NOT OWING TO THAT *MECHANICAL IMPOSSIBILITY CALLED ATTRACTION.*"

"To accommodate THE *HYPOTHETICAL LAW OF UNIVERSAL GRAVITATION* to the phenomena of the Planets, astronomers have preferred to change the mean density of matter itself; and the Earth, for comparison, being taken at a density of 1000, to accommodate Mercury to THE ASSUMED LAW, it is taken as 2,585; Venus, 1,024; Mars, 656; Jupiter, 201; Saturn, 103; and Herschel, 218. Consequently, we have the *paradox*, that Jupiter, 1,290 times larger than the Earth, contains but 323 times more atoms. Saturn 1,107 times larger, but 114 times more atoms. Even the Sun, according to these theorists, is but one-fourth the density of the Earth! There may be differences, but chemistry and all the laws that unite and compound atoms, are utterly at *variance* with so rash and wild an *hypothesis.*"

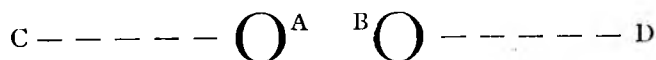
"It is waste of time to break a butterfly on a wheel, but as astronomy and all science (so-called or hypothetical,—Ed.) is beset with *fancies* about attraction and repulsion, it is necessary to *eradicate them.*"



"If there are two bodies, and it is required to move A to C, the force moving A to C *must* proceed from the side A. Either some impact, or some involvement of a motion towards C, *must* act at A to carry A to C. The modern schools, however, assert that B may move A to C, and A move B to C; and this is *mutual attraction*!! Hence it is necessary to believe that B acts on the side A, where B is *not present*; and that A acts on B on the side B, where A is not present. In other words, A is required to be where it is not, and also be in force at A, so as to move B to C! all of which is absurd."

"If in any case A and B approach, it is not because A moves B towards itself, or B moves A towards itself, but owing to some causes which affect the space in which A and B are situated; and which causes act on A at A, and on B at B . . . the statement that A moves B, and B moves A, is ignorance, and is what is meant by attraction. It is also worse than ignorance to justify idleness by asserting that the true cause is indifferent; or to justify ignorance, by asserting that it is unknowable!!"

"This reasoning applies to every species of Attraction, whatever may be the pomposity of equivocal terms in which it is described. Universally, bodies cannot push other bodies towards themselves."



"If A and B are said to repel one another, and that B makes A move to C, and A makes B move to D, we have to bear in mind, that while A is moving to C it is in force *only in that direction*, and *cannot* therefore be *moving* B towards D. In like manner, while B is moving to D, it is in force *only in that direction*, and *cannot*, therefore, be in force in the contrary direction so as to move A to C." Every species and variety of Attraction and Repulsion are therefore absurd.

"MATTER IS IN ALL CASES *THE CONDUCTOR OF MOTION*. If a body moves, it is because it is the patient of some sufficient momentum of body or matter acting ON the side FROM which the body moves, and only in force in *that direction*." "Some adopters of attraction, &c., talk, by false analogy, of *drawing*, others of *pulling*, *lifting*, &c. La Place INVENTS gravitating atoms, and gives them a velocity of 6,000 times that of light, which in some way (known only to himself) performs the work of bringing the body in; others IMAGINE little hooks! As to drawing, pulling, &c., *it behoves them to show the tackle*—the levers, the ropes, &c."

"In spite of all the learning, ingenuity, and elaborations of men, confessedly very able, if there is not and cannot be any action of the nature of attraction, and if the phenomena ascribed to it are local effects

of palpable local causes, and if all the phenomena and involvement may be clearly explained on different principles, then it may be to be lamented that so much ability and character should have been wasted, while a respect for truth and sound reasoning demands that the whole should be forgotten as a dream, or demolished as a card-house."

(To be Continued.)

## VARIABILITY OF PENDULUM VIBRATIONS.

Many contend that because a pendulum vibrates more rapidly in the northern region than at the equator the earth is thereby proved not only to be a globe, but to have axial motion, and because the variation in the velocity is that of gradual increase as the North Pole is approached, it is concluded that the earth's true shape is that of an oblate spheroid—the diameter through the poles being less than that through the equator. The difference was calculated by Newton to be the 235th part of the whole diameter; or, that the polar was to the equatorial diameter as 680 to 692. Huygens gave the proportion as 577 to 875, or a difference of about one-third of the whole diameter. Others have given different proportions; but the differences of opinion, each the result of calculation, has become so great that many have concluded that the earth is really, instead of an oblate, an oblong spheroid. It is argued that as the length of a pendulum vibrating seconds at the equator is 32,027 inches and at the North Pole 39,197 inches that the earth, like an orange, has a globular form, but somewhat flattened at the "poles." This so-called argument proceeds and depends upon the ASSUMPTION that the earth *is* a globe having a "centre of attraction of gravitation," towards which all bodies gravitate or fall, and as a pendulum is essentially a falling body under certain restraint, the fact that when of the same length it oscillates or *falls* more rapidly at the north than at the equator is a proof that the northern surface is nearer to the "centre of attraction," or centre of the earth, than the equatorial surface; and of course if nearer the radius must be shorter, and therefore "the earth is a spheroid flattened at the poles."

The above is very ingenious and plausible, but unfortunately for its character as an argument THE EVIDENCE IS WANTING THAT THE EARTH IS A GLOBE AT ALL; AND UNTIL PROOF OF CONVEXITY IS GIVEN, ALL QUESTIONS AS TO ITS BEING OBLATE, OBLONG, OR ENTIRELY SPHERICAL, ARE LOGICALLY OUT OF PLACE!!

It is the duty of those who, from the behaviour of a pendulum at

different latitudes, contend that the earth is spherical to first prove that NO OTHER cause could operate besides greater proximity to a centre of gravity in producing the known differences in its oscillations. This not having been done, nor attempted, *the whole matter must be condemned as LOGICALLY INSUFFICIENT, IRREGULAR, AND WORTHLESS FOR ITS INTENDED PURPOSE.* M. M. Picart and De la Hire, two celebrated French *savans*, as well as many other scientific men, have attributed the variations of the pendulum to differences of temperature at different latitudes. It is certain that the average changes of temperature are more than sufficient to bring about the variations which have been observed. The following quotation will show the PRACTICAL RESULTS of these changes :—

“All the solid bodies with which we are surrounded are constantly undergoing changes of bulk, corresponding to the variations of temperature. . . . The expansion and contraction of metals by heat and cold form subjects of serious and careful attention to chronometer makers, as will appear by the following statements :—The length of the pendulum vibrating seconds, *in vacuo*, in the latitude of London (50° 31' 8" north) at the level of the sea, and at the temperature of 62° Fahr. has been ascertained with the greatest precision to be 39·13929 inches. Now, as the metal of which it is composed is *constantly* subject to variations of temperature it cannot but happen that its *length* is constantly varying, and when it is further stated that if the “bob” be let down 1·100 of an inch, the clock will lose ten seconds in twenty-four hours ; that the elongation of 1·1000 of an inch will cause it to lose one second per day ; and that a change of temperature equal to 30° Fahr. will alter its length 1·5000 part, and occasion an error in the rate of going of eight seconds per day, it will appear evident that some plan must be devised for obviating so serious an inconvenience.”—NOAD'S *Lectures on Chemistry*, p. 41.

“The mean annual temperature of the whole earth at the level of the sea is 50° Fahr. For different latitudes it is as under :—

Latitude (εqr.)	0=84·2°.	Length of pendulum	39·072.
”	10=82·6°.	”	”
”	20=78·1°.	”	”
”	30=71·1°.	”	”
”	40=62·6°.	”	”
” London	50=53·6°.	”	39·139.
”	60=45·0°.	”	”
”	70=38·1°.	”	”
”	80=33·6°.	”	”
” Pole	90=00·0°.	”	39·197

‘MILLION OF FACTS.’

From the above table it is seen that the temperature gradually decreases from the equator towards the “pole,” which would of necessity *contract* the substance of the pendulum, or shorten it, and cause it to vibrate more rapidly. Besides the temperature of a given latitude, the density of the air must be taken into account. In numbers 294 and 480 of the *Philosophical Transactions*, Dr Derham records a number of experiments with pendulums in the open air, and in the receiver of an air-pump, which he summarises as follows :—“The arches of vibration *in vacuo* were larger than in the open-air, or in the receiver before it was exhausted ; the enlargement or diminution of the arches of vibration were CONSTANTLY PROPORTIONAL TO THE QUANTITY OF AIR, or rarity, or density of it, which was left in the receiver of the air-pump. And as the vibrations were longer or shorter, so the times were accordingly, viz., two seconds in an hour when the vibrations were longest, and less as the air was re-admitted, and the vibrations shortened.

Thus it is evident that two distinct and tangible causes necessarily operate in practice to produce variability in the oscillations of a pendulum at different latitudes, without having recourse to a “FLATTENING AT THE POLES OF AN IMAGINARY GLOBE.” First, the gradual diminution of temperature as the pendulum is carried from the equator to the polar region tends to shorten its length, and thus to increase its number of vibrations per hour or day ; and, secondly, as the polar centre is approached, the air is colder, therefore denser, and therefore the ‘arches of vibration’ shorter, and the times of oscillation less, or, in other words, the number of vibrations greater in a given period. It has also been ascertained that the pendulum is influenced, other conditions being the same, by electric and magnetic states of the atmosphere. When intense electric conditions exist the arches and times of vibration are less than during the existence of opposite conditions. Hence, if in different latitudes pendulum experiments are made *in vacuo*, at the same temperature, and always at the level of the sea, different electric and magnetic conditions prevailing, will induce variable results. THE ATTENTION OF SOME OF THE MOST ACCURATE AND PATIENT OBSERVERS HAS BEEN DIRECTED TO THIS MODE OF PROVING THE OBLATE SPHEROIDAL FORM OF THE EARTH, BUT THE RESULTS HAVE NEVER BEEN SATISFACTORY, NOR SUCH AS WAS EXPECTED, OR THAT THE THEORY OF ROTUNDITY SHOULD PRODUCE.

Mr Bailey expresses (in *Memoirs of the Royal Astronomical Society*, Vol. 7), the opinion “that the vibrations of a pendulum are powerfully affected, in many places, by the local attractions of the sub-



stratum on which it is swung, or by some other direct influence at present unknown to us, and the effect of which far exceeds the errors of observation."

"General Sabine himself," relates Captain Foster, "was furnished with two invariable pendulums of precisely the same form and construction as those which had been employed by Captain Kater and myself. Both pendulums were vibrated at all the stations, but FROM SOME CAUSE, which Mr Bailey was UNABLE TO EXPLAIN, the observations with one of them were SO DISCORDANT at South Shetland as to REQUIRE THEIR REJECTION." FIGURE OF THE EARTH: J. Von Gunpach.

From these remarks and quotations it is obvious that the ASSUMPTION of Sir Isaac Newton that the earth is an oblate spheroid is not confirmed by experiments made with the pendulum. *The Zetetic*. Extract from *English Mechanic and World of Science*, Oct. 23rd, 1896.

In the column headed "Letters to the Editor," the following reply appears, signed by "A Fellow of the Royal Astronomical Society."—

"In reply to "Foucault's Pendulum" (Query 89090, p. 192), the plane of oscillation of the pendulum in latitude 5° would rotate in a retrograde direction at the rate of only 1'307336° per hour; in other words, it would take 11'4737 days, or about 11½ days, to complete its rotation. Hence, while it might *theoretically* be employed to show the earth's rotation, IN PRACTICE IT MUST FAIL TO DO SO."

JUST WHAT THE "Flat-earthites" SAY!!! Ed.

## THE SURFACE OF WATER.

BY LIEUTENANT E. E. MIDDLETON, R.N.

A SERIES OF LETTERS WRITTEN IN 1871.

No. 1.

SIR,—Being delighted—nay, more than delighted, charmed—nay, more than charmed, invigorated, galvanized, and thoroughly electrified to find that even one journalist in London has the courage—nay, more—the headlong, precipitous, plumb-live frenzy to approach, peer at, gaze upon, then fall—yes, actually fall to the other side of an unpopular subject, and that subject the much-dreaded volcanic subject, the shape of the earth; I, being thus inspirited, have dared to enclose you these few lines in hopes that I may in some way assist to buoy up the sinking hearts of any who shall have whispered to himself or herself the latest and most astounding *fact*, that, after all—yes, after ALL, and I hope your readers will plunge to the full significance of the word ALL—the earth is *really, actually, undeniably a plane*, and NOT A

GLOBE. Have I been to sea? Yes! Yes, for months at a time, and I fully believe the sea is flat; and that all water, motionless, or such as is simply influenced by the action of heat and cold, or tide, must conform to the shape of a plane, and cannot by any possibility be convex. To plainly present a convex surface, water must be *running*—not only running, but boiling along the confined channel of a river, at a speed of some 12 or 15 miles an hour. The Jheelum is a river that runs out of Cashmere—a deep, large river, and its course through the mountains is often a very grand sight, and many a pleasant hour I have spent watching at some noble sweep of the hurrying torrent, and as often I have remarked that on such occasions the centre of the stream was raised at least a foot, if not more, above the water on each side of the river. The reason for this convexity is simply that the central stream runs much faster than the water at the sides, or that approaching the sides. Such central stream running about twelve miles an hour has certainly a convex surface. A real actual convexity is plainly visible to the raked eye in the short distance of the width of a river; why, then, is the *supposed convexity* (of the globular school) *not* apparent on still water? Because *it does NOT EXIST!*

Now for a dilemma—a dilemma for the Globe—ites. Given *still water*, convex; when or in what position does it become level? For clearly, if a pool in a river is convex, then the running stream must be level. Where, Globe-ite, where? "Oh, just where its convexity is plainly visible to the eye." Such is the answer they, the Globe-ites,—somewhere would have to give—remember, reader, I am only supposing a case—yes, *have to give*, by the law of opposites. Convex being opposed to level, the still water being convex (as they say), it stands to reason that the utmost development in the other direction must be the level; but then we see distinctly that such is convex—convex to the naked eye; therefore the Globe-ite has perforce to state that the thing shall be exactly the reverse of what it actually is!—Yours,

E. E. M.

(To be Continued.)

## IN MEMORIAM.

We deeply regret to announce the death on November 4th, 1896, of our friend, MRS. CARPENTER, relict of William Carpenter, of Baltimore, U.S. America.

"Their precious dust the Lord will take, and freshly mould."

## METEORIC SHOWERS—MISNAMED COMETOIDS.

BY LADY BLOUNT.

A recent issue of *The Morning Post* contained an article entitled "Meteoric Showers," in which it is stated that in spite of our forefathers' familiarity with these displays, it did not occur to them that they were periodical. Nor was the fact so discovered until the 19th century was far advanced. Records of these phenomena go back many hundreds of years, and in China a long time B.C.

Humboldt recorded a wonderful display of "shooting stars" in Cumana, South America, on the night November 11-12, 1799. Thousands of meteors were darting through the sky from north to south for a period of four hours. The same meteoric display was seen also in Guiana, in the United States, in Labrador, and as far north as Greenland. But very little of it was witnessed on our side of the Atlantic. This was unheeded until the night of November 12-13, 1833, when there was a recurrence of meteoric showers, which is believed to have been the most superb display ever witnessed. This again took place on the American side of the ocean. Professor Olmsted remembered Humboldt's hint that these meteoric showers were probably periodical; and this led the Professor to watch attentively for the next display, which appeared about the year 1866.

The writer of the above-quoted article says:—"What may be the precise meteorological influence of these meteoric showers is not known, but it is perhaps hardly necessary to remind even the non-scientific reader that they are not what Holmsted describes as 'verie starres in deed,' otherwise the sky would long since have been left bare. The explanation offered was that the meteors are particles of matter which are distributed in myriads along the tracks of comets, and which Schiaparelli mistaking calls cometoids."

It is said that they are "drawn" with immense velocity into our atmosphere, the resistance of which medium generates such an intense heat in the wandering particles that they, igniting to white heat, become visible to us for a second or two as luminous objects, or "stars," and soon disappear, being burnt into powder or gas. But what is the power that "draws" them? Gravitation has been shown to be a mere hypothesis with no foundation in fact, and it is contrary to all our experience to think that one body can draw or pull another without any pulling tackle between them.

Things fall downward, by their own weight, and in reference to the recent violent earth shocks which were felt in many parts of England,

but principally in the West, on December the 17th last, it was suggested that there may be some connection between meteors and earthquakes, observers having remarked that this point (although not easy to determine) is worthy of consideration.

Some think the earth periodically crosses the supposed track of these meteorites. But proof has never been given that the earth has any axial or orbital motion. Another opinion is that these meteors are similar in nature and substance to what are termed thunderbolts, and merely chips of metallic substance from off the planets!!!

However, I think that this proposition has met with a cutting and a closing reply from one who showed that the theory must be erroneous, as our earth, which is supposed by Evolutionists to be a "planet," is not in the habit of periodically having pieces chipped from off its surface through any violent collision or otherwise. From the fact that these showers are periodic as well as from many other reasons, we have evidence showing that the fall of *meteors in 1833* was NOT the signs foretold by Christ, who said, "Fearful sights and great signs shall there be from heaven. And there shall be signs in the sun, and in the moon, and in the stars" (Luke xxi. 11-25). Besides, He said that the "Stars should fall from heaven," &c. (Matt. xxiv. 29). And, as has been shown, "meteors" are not stars. The stars and the planets still retain their God-appointed place in the sky, as can be seen on any clear night. Again, the displays have been always local, as, for instance, those already referred to; and if these, the greatest displays recorded, were *not* world-wide, how much more were the lesser displays confined to particular localities. Whereas the signs prophesied by "Him who created all things that are in heaven and in earth, visible and invisible" (Col. i. 16) are evidently to be *world-wide*, because the world has to be warned of His second coming, which is drawing near.

These are the words of Christ with which I will close this short article—"The powers of heaven shall be shaken, and THEN shall they see the Son of Man coming in a cloud with power and great glory. And when these things begin to come to pass, then look up, and lift up your heads, for your redemption draweth nigh. And he spake to them a parable, "Behold the fig tree and all the trees; when they shoot forth ye see and know that summer is nigh at hand. So likewise ye, WHEN YE SEE THESE THINGS COME TO PASS, *know* ye that the Kingdom of God is nigh at hand. Heaven and earth shall pass away but My words shall not pass away" (Luke xxi. 25-33). These words bear great import, and afford proof that the fall of meteors in 1833 was not *the* sign predicted by Christ.

## "FLAT-EARTH-ITES" v. GLOBE-EARTH-ITES.

"Sir Robert Ball is going to Portsmouth shortly to lecture upon "Recent Researches on the Sun," and strangely enough something of a hostile reception is being arranged for him in one quarter.

One would have thought that if there was a single subject which had escaped the taint of heated controversy it was astronomy. But Portsmouth boasts a local astronomer, one Ebenezer Breach, who is getting some posers ready for Sir Robert. According to Mr. Breach the sun is only 5,000 miles distant from the earth, and not 95,000,000. "Is Sir Robert aware," demands Mr. Breach, "that it is decided in Portsmouth that the teachers shall not teach such falsehoods in this enlightened age to their scholars in the Board schools, and push 95,000,000 cartload of falsehoods down the children's throats to please 'red tape' in the Government? Whitehall is beginning to see the evils of such a system. . . . Therefore the 3,000,000 children of England shall not be taught falsehoods to please Sir R. Ball, General Drayson, or all the star army put together. Portsmouth teems with intelligent young people, and such intelligence shall not be misled and trampled upon by the absurdities of the universities that should at once receive a national and universal cleansing." —*Daily Mail, November 16th, 1896.*

*To the Editor of the Daily Mail.*

SIR,—In your issue, Nov. 19th, you make a statement in your comments on Sir Robert Ball's coming lecture at Portsmouth, which leads me to think that you are in ignorance of the existence of the Universal Zetetic Society, of which "Parallax" was the founder.

The statement I refer to is: "One would have thought that if there was a single subject which had escaped the taint of heated controversy it was astronomy."

May I ask, WHY should modern astronomy escape from being controverted? Would you believe that modern astronomy is nothing but a series of conjectures and contradictions? I judge from what you say that you believe the sun to be 95,000,000 of miles from the earth? May I ask you to remember that it was lately removed by Professor Gill to close upon 3,000,000 of miles *nearer* to the globe than it was previously *supposed* to be? How much more battleboard and shuttlecock work are these astronomers going to have with poor old "Sol?"

I have said that modern astronomy is a series of contradictions. Now, I will prove my assertion from *their own* statements. Then you will see WHY modern astronomy *should* be controverted.

Pythagoras, who asserted that he had been in hell for some time, taught that "the sun is the centre of the universe, and that all the planets revolve in elliptical orbits round it." (See *Lempriere's Classical Dictionary*.) He *supposed* the sun to be 44,000 miles distant from the earth-globe. Copernicus, the resuscitant of the philosophy of Pythagoras, *supposed* its distance to be 3,391,200 miles. Kepler 12,376,800 miles. He made another guess, and made it 26,000,000 miles!! Ricciola 27,360,000 miles. Sir Isaac Newton 28,000,000 miles. He made another guess, and made it 84,000,000 miles!! Hind 91,000,000 miles.

He made a second guess, and made it 95,298,260 miles. Herschel 95,000,000. D'Alembert 96,000,000 miles. Mayer 184,000,000 miles!! Professor R. A. Proctor 91,500,000. Sir Robert Ball 93,000,000 miles. There are many other intermediate guesses by others, but those given suffice to show the utter inability of our astronomers to ascertain anything like an approximate distance of the sun from the earth. Professor R. A. Proctor, speaking of the sun's distance, says: "Putting the matter as one of *probabilities*, as ALL SCIENTIFIC STATEMENTS MUST BE . . . the wonder is that they have any idea at all of the distance." The fact is proved by their own statements that *they have not got any idea at all of its distance*!! Sir Isaac Newton, in his Principia, resuscitated the fundamental proposition of Pythagoras thus; "The sun is the centre of the solar system and *immovable*." Since then Professor Herschel found out that the sun was *NOT immovable*. Thus it is indisputably proved that astronomers absolutely contradict each other by asserting, as Professor Proctor says, mere "probabilities," and, therefore, they do not know anything about natural phenomena or its causes. No, not even the surface shape of the earth they walk about upon! Is it not patent to you that Professor Herschel, by his discovery of the *sun's motion*, utterly refutes the *supposition* that the sun is *immovable*, and, therefore, it is *not* the centre of the solar system, or in fact any system at all, unless it be the system of *supposing* things which they do not understand anything at all about, and indeed, in many instances, have no existence? Consequently the "elliptical orbit" business and the whole foundation and vital propositions of modern theoretical astronomy, are, from astronomer's showing, utterly false, having no basis in fact, nature, or natural phenomena.

No doubt Sir Robert Ball will inform his Portsmouth hearers that "the heat of the sun is so intense that even the most refractory substances there present—such, for example, as iron, flint, or lime—when submitted to the awful solar temperature will be transformed into glowing vapours." But his admirers must remember that others have asserted that "there is no heat *in* the sun," "heat does not come *from* the sun." One has even gone so far as to assert that "the sun is a frozen mass eternal." But no doubt Dr Ball knows best about the matter, seeing that he has attained an age compared with which the age of Methuselah is nothing! The Doctor is reported to have said: "When the earth was young it went around so fast that the day was only three hours long. The earth was liquid then (in liquor?) and it spun around and around at that fearful speed . . . it at last burst in two. The smaller part became the moon, which has been going round the earth ever since." This puts fire-eating out of court altogether! Sir Robert must have been there at the time, and have seen the moon, in utter de-

fiance of Sir Isaac Newton's "splendid law of universal gravitation," run away from its parent! Then, sir, there is "that fearful speed" of which Sir Robert speaks, which leaves us to conclude that at that time all created intelligence was as senseless as lifeless matter.

A scientific fact should be as sacred as a moral principle, but the fact is, Modern Astronomy is utterly devoid of any facts as the resultant of its own hypotheses.—Yours respectfully,

LEO. CASTLE.

P.S.—By book post I forward you a copy of our journal for Sept., 1894, in which you will find the first part of a series of articles on *The Pretensions and Pretences of Modern Astronomy*. This I would ask your careful perusal of. Also you will find a copy of *One Hundred Proofs the Earth is not a Globe*.

L. C.

The Editor of the D.M. did not print our letter, but the following editorial hocus-pocus appeared in the issue for November 27th:—

#### "FLAT-EARTH"-ITES.

"The agitation against the popular conception that the earth is round has just come under new management, and henceforth 'the majestic form of Truth' is, according to the sentiments quoted in the organ of the Flatites, to be made to 'stand before the bar of justice' in a manner that will make 'that hideous monster, Error, hang its head in silence' at a very pronounced angle.

The *Daily Mail* reporter who set out to find why the movement had come under new management thought at first it was because the old management had neglected to prove the flatness of the earth by a Hyde Park demonstration, or some such simple and obvious plan of asserting the mighty truths of nature. But as events proved, the only cause for the change was the ill-health of Mr. Albert Smith, which had caused him to hand over the editorship of *The Earth not-a-Globe Review* to other hands. The new editor appeals to all Zetetics to help "to spread the truth that the earth is a vast irregular plane, stretched out upon and standing in and out of the waters of the mighty deep, as scripture, confirmed by practical facts and common sense, declares beyond refutation."

And not content with this contract, the "Flat-Earth"-ites are, in spare time, going to expose the glacial theory—which they hold to be a greater fraud than the Works Department of the County Council—and to make violent assaults upon the "boasted accuracy of modern astronomy."

Evidently the Editor of the *Daily Mail* had to hang *his head in silence* at a very pronounced angle!!! least this so-called "most exact of the sciences" should be manifested as a fraud. Why! in the first six words of his grandiloquent remarks he speaks the truth, and did not know he had done so!! "The popular conception." Yes, that is all modern astronomy is from beginning to end! A mere CONCEPTION, having no foundation in fact, reason, or common-sense! Why, he did not so much as perceive that when he proclaimed modern astronomy to be "the popular conception" he exposed the basis upon which that science is founded to be a mere *ignis fatuus*, leading its followers into the destructive quagmire of contradiction.

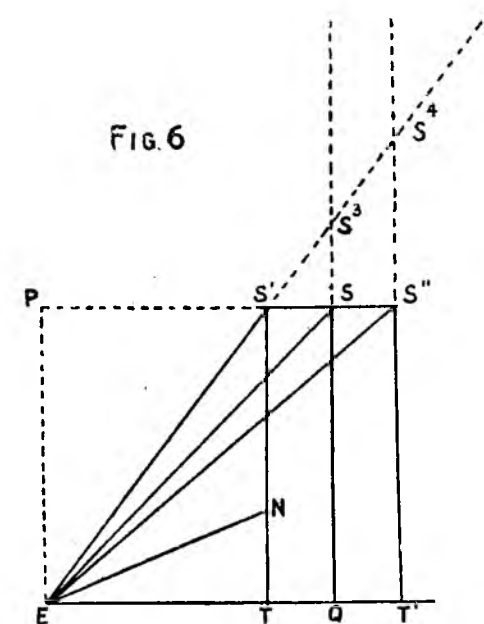
LEO CASTLE.

#### TRIGONOMETRY AND ASTRONOMIC DISTANCES.

Trigonometry—the measurement of triangles—has been defined as "the science of the numerical relations between the sides and angles of triangles" (Blackburn); and teaches "how from given values of some of the sides and angles to calculate, in the most convenient way, all the others." In presence of the *Ordnance Survey* of this country, there is no room to question the applicability of this science to terrestrial distance, and the heights of objects upon earth's surface. It is assumed by both orthodoxist and paradoxist—spherist and planist—to be equally applicable to the heavens. Such assumption raises a question for examination.

Obviously, from the nature of the case, the first requirement is to find the triangle.

The plane triangle upon earth's surface need not detain us. The question is, whether, as the surveyor can determine the vertical distance or height of a light upon a mountain side, can the astronomer determine within a reasonable margin, with certainty, the vertical distances of objects in the heavens?



For the sake of simplicity, let us imagine the vertical section of a mountain, in which, Fig. 6, EQ is a portion of the base in the plane of flat earth's surface; let S be a light upon the mountain side, and vertical to Q; then for the station at E let the observed altitude of S be the angle SEQ = 45°; join SQ; we have thus the right angled triangle EQS.

Draw S'S parallel with EQ; let that be the diameter and the plane of a circuit in which the light moves around the mountain. Join S'E, S''E. Obviously the angle S'E Q is less than the angle SEQ; also that the angle S'E Q is greater

than the angle  $S E Q$ . Let  $S'$  be vertical to  $T$ , a point in the base, and  $S''$  vertical to  $T'$ , another point in the base. Let  $E S'$  be produced to  $S^3$  and to  $S^4$ . Join  $S^3 S$ , also  $T' S'' S^4$ .

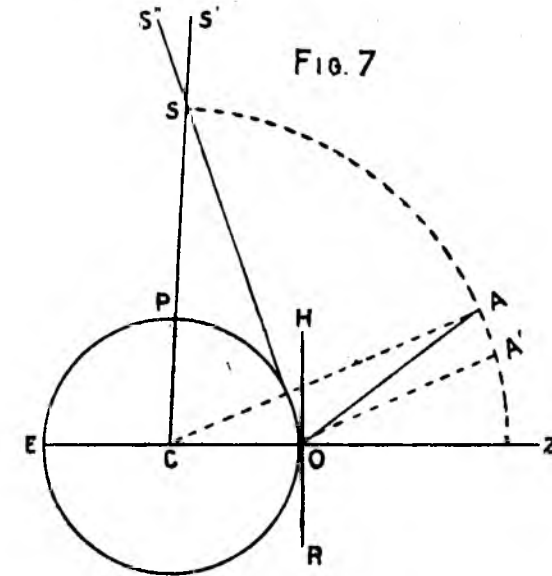
Now by virtue of the *observed altitude* only, we could not construct definite triangles, because as seen from  $E$  the light might be at  $S'$ ,  $S^3$ ,  $S^4$ , or at *any point* in the same straight line, though infinitely produced—the *angular elevation being the same* for the apex of each of the triangles  $E S' T$ ,  $E S^3 Q$ ,  $E S^4 T'$ , though the *vertical distance varies* in each. Hence the need for a knowledge either of the base line, or the point in the line  $E T'$  to which the light is vertical. With such knowledge we then can construct the right-angled triangles  $E T S'$ ,  $E Q S$ ,  $E T' S''$ , the solution of which by trigonometry would show the *vertical distance of the light* to be the same for the different points  $S'$ ,  $S$ ,  $S''$  in its circuit, though the *angular elevation varies* in each triangle.

We purposely omit the solution of these triangles, as there would be no dispute upon this point amongst the competent, in order that attention may be the more emphatically directed to the *logical* aspect of the main question, this being our immediate business.

From the foregoing it will be evident that in ascertaining the height of an object, there is required a definite triangle, one side of which must be of known value. The Surveyor obtains these conditions.

*Utilising the same figure for astronomical purposes, then upon the theory of a flat earth*, let  $E$  be the northern centre,  $Q$  a point upon the equator; then  $E Q$  is the equatorial radius.  $T$ ,  $T'$  the tropics;  $Q S$ , the vertical direction of the sun at equinox;  $S'$ ,  $S''$  the solstices, the limits of the sun's north and south declination. Now at the time of the northern winter, when the sun is at its greatest south declination, the point  $S''$ , the observer at  $E$  could not obtain the line of direction  $E S''$  because the sun would be  $23\frac{1}{2}^\circ$  below his horizon  $E Q$ ; at equinox he could not obtain the line of direction  $E S$ , because the sun would then be upon his horizon  $E Q$ . In the northern summer, when the sun is at its greatest north declination, the point  $S'$ , the observer at  $E$  could not obtain the line of direction  $E S'$ , for by observed meridian altitude the angle of  $23\frac{1}{2}^\circ$  elevation would be given by the line  $E N$ . Thus, instead of the observed elevations as obtained by the Surveyor, and represented by the lines of direction  $E S'$ ,  $E S$ ,  $E S''$ , the astronomer obtains respectively  $E N$ ,  $E Q$  and *invisibility*. That would be an exceedingly enlightening demonstration by which it could be shown that ordinary plane trigonometry is equally applicable in these two cases; for it cannot be shown that the sun's vertical distance varies with its declination. If any object to observations at the assumed station  $E$  because of its practical inaccessibility, then in our paper on *Finding the latitude*, we will show the same relative results for actual observations at lat.  $51\frac{1}{2}^\circ$  N. (London).

IS TRIGONOMETRY APPLICABLE UPON THE THEORY OF EARTH A SPHERE?  
—A triangle is asserted to be found by virtue of observations from which there can be deduced an angular value—*parallax*. Parallax is defined as the difference in the apparent position of an object in the heavens when viewed from two stations—the one being the datum point of earth's centre, the other, that of the observer upon earth's surface; the angle measuring this apparent difference is the *parallax* of the object. It may be illustrated by half-a-dozen diagrams; in Fig. 7 we give the simplest.



Let  $E P O$  be a plane intersection of earth through the poles;  $C$  the centre,  $O$  station upon earth's surface,  $S$  object in the heavens;  $C S S'$  the apparent direction from the datum point of earth's centre  $C$ ;  $O S S''$  its apparent direction to an observer at station  $O$ ; the angle  $C S O$  is the *parallax*. When subtended by earth's radius  $C O$ , it is called *horizontal*, or *diurnal* parallax— $C S$  being taken as the horizon—the angle has then its greatest value; as the object progresses towards  $Z$ , the angle contained between  $S C$  and  $S O$  diminishes; upon its reaching the zenith  $Z$  it vanishes, by the coincidence of the lines. Obviously the same result would happen if  $O$  moved in the direction  $O P$ ,  $S$  being stationary.

If we take  $C$  as the sun, around which the earth moves in the orbit  $O P E$ , then  $C O$  is the radius of earth's orbit, and is the scale of measurement for the distances of the stars, and the angle at  $S$  is the *annual parallax*, if this angle equalled one second of arc, ( $0.1''$ ). then  $C O$  being taken as 93,000,000 miles, the distance  $C S$  would be nearly twenty billions of miles (*i.e.*, multiplying  $C O$  by the ratio of the unit of circular measure to  $0.1''$  of arc).

In examining this subject of parallax we must refer to some elementary teaching of orthodox astronomy, viz.,—

"From pole to equator equals a right angle."

"From zenith to horizon equals a right angle."

"The Rational or astronomical horizon is an imaginary line passing through earth's centre (parallel with the sensible horizon, and determines the rising and setting of sun, stars, and planets.)"

"The Sensible Horizon bounds the spectator's view." Now, logical consistency requires that as *observed altitudes* are measured from the *plane of the sensible horizon*, the astronomer ought to insert the line  $H O R$  when illustrating *parallax*. If the object  $S$  be theoretically upon the Rational horizon  $C S'$  but by actual observation upon the Sensible horizon  $O H$ , and these horizons be parallel, how can angular difference be obtained from two parallel lines? Or how can an *imaginary line*

passing through earth's centre C—a point to which *the whole heavens are equally open*. avail to determine the rising and setting of sun, &c. ? The True or Rational horizon is but a theoretical figment serving for exercise in abstract mathematics.

The equator E C O when produced to the distant heavens Z is called the equinoctial, from which declination is measured. Suppose an object at A, join C A, the angle Z C A is the declination of A, say  $25^\circ$ . To an observer at O the object would be seen at a *zenith distance* of  $25^\circ$ , *i.e.*, the angle Z O A'; now the two lines C A, O A' which make the equal angles of  $25^\circ$  with the same straight line C O Z are indisputably parallel.

If it be true that the *zenith distance* of  $25^\circ$  by observation and the declination of  $25^\circ$  are properly illustrated by the lines O A and C A meeting at the point A, and so making the angle C A O—it follows that  $25^\circ$  of the smaller circle described with the radius O Z would equal  $25^\circ$  of the larger circle described with the radius C Z in the numerical value of arc—a fallacy too glaringly obvious for contention; hence there is no readable angle as C A O.

Again the angle—*parallax*—would be a *residual amount*, before obtaining which, allowances would have to be made for errors of various kinds and for unknown quantities, such as error in observer's latitude, of lens, in manipulation, aberration, refraction, &c., &c., and then when found what is its value? the breadth of a spider's thread as the base-line of a triangle, its sides being  $2\frac{1}{2}$  inches in length, in the case of the sun; or the same base-line with one yard as the length of the sides of the triangle in the case of a star.

In "The Story of the Heavens," now issuing in monthly parts by Cassell & Co., (p 482) it is plainly stated by Sir Robert Ball that "*the parallax of the star is in the great majority of cases an absolutely insensible quantity.*" Advocates of diverse theories would assign different causes for "no readable angle;" but *no parallax* is the inevitable result, geometrically, upon a sphere—observed altitudes being measured from the sensible horizon, the plane of which varies with the latitude.

Let it be noted also (as stated in connexion with Fig. 3) that the variation in the apparent position of an object in the heavens is equivalent to the variation in observer's latitude, and is the same for both sphere and plane, being limited to the value of one side of a square upon the equatorial radius—upon the plane theory this displacement appears as varying altitudes; upon the spherical theory the amount of apparent displacement is marked off upon the axis of rotation which is cut at right angles by the plane of the observer's circle of latitude.

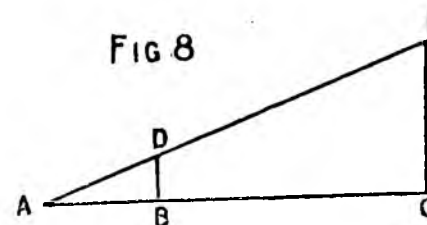
Now *angular elevation* varies with declination—*i.e.*, with the object's position in the line S' S'' (fig 6), or with the observer's latitude in the line E T' separately or conjointly, though the vertical distance S Q remains constant.

Now if there be no parallax for a fixed star upon the horizon, neither can there be any parallax for sun, moon, or planet; because, the two horizons being parallel, these two lines of direction cannot meet at an angle.

From all the preceding some simple logical conclusions are unavoidable, *viz* :—Observed altitudes afford no data for finding vertical distances, but merely from the known declination to deduce the latitude, and from the known latitude to deduce the declination—applying equally to sphere and plane; that upon the plane a common apex cannot be found for two or more triangles obtained by observation from different stations, N and S latitudes being considered separately; upon the sphere the parallelism of all lines to any given point in declination, which necessarily includes the position of all objects in the heavens, precludes the possibility of obtaining the necessary triangles.

Hence we are able to state emphatically that ordinary plane trigonometry is utterly inapplicable for finding *any astronomic distances*.

The cause of the apparent displacement of an object in the heavens is a matter of distinct interest. Possibly it may result upon the operation of the law of the visual angle, by virtue of which magnitudes decrease as their distances increase; this in combination with the law of perspective which is based on the similarity of given triangles. So that the apparent elevation of an object in the heavens above earth's surface may be regarded as magnitude; as the observer recedes from the point to which the object is vertical, so its height seems to diminish; when he has receded to a distance equal to the equatorial radius, as in Fig 6, from Q to E, then the object S appears as touching earth's surface—that is, upon the horizon E Q.



Then as to perspective, if a landscape be viewed through a window pane that is viewing nature under certain limitations—the view would be enlarged or contracted according to the distance of the eye from the pane; but the distance of the eye once fixed, then all that is seen within the limits of E C (Fig. 8) is reduced to the limits of D B. Here we have two triangles which are similar, because as the ratio of A B is to B D, so is the ratio of A C to C E; that is simple arithmetical proportion. But let us note a distinction here: the artist in reducing his view to canvas is not concerned with the ratio of A B to A C, that would involve the *scale* of the picture to the dimensions of nature; the requirement is that all that is seen in nature in the triangle A C E shall be represented in the same *proportions* in the miniature triangle A B D. Now our view of Creation is limited by the bounding line of the sensible horizon. Where does the plane of the sensible horizon intersect the heavens? By Fig. 6 we have seen that the sun as S'' is invisible to an observer at E; when at S it appears in the direction E Q; when at S' it appears in the direction E N. Now excepting the zenith and horizontal directions—*i.e.*, Q S and E Q, every observation of the sun at equinox for stations between E and Q would bring the line of direction within the distance S Q, which obviously is one side of a square upon the radius E Q. To an observer at E object's between S and S'' are invisible; between S and P they have elevation; S is the vanishing point; and the plane of the sensible horizon takes the direction of a diagonal of a square upon the radius of the equator. Hence this radius is the measuring rod of the *visible portion* of the heavens, and this in the direction of their breadth only; and this diagonal line, in connexion with the ellipse resulting upon observer's eccentric position, enables us to show by geometrical diagram the length of day and night. But this is a distinct subject, and cannot be dwelt upon here; it is thus referred to now because every now and again enquiries are made upon this point as though the length of day could not be determined upon the plane theory.



## ANSWERS TO CORRESPONDENTS.

All letters to the Editor must be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. All letters *must* be prepaid and addressed to

MR J. WILLIAMS,

32, Bankside, LONDON, S.E.

Thank you, Mr. Harpur, for your "remarks on the E.R. for Sep.-Dec., 1896." In reply I would say that I have read somewhere, and it is sound advice. "Wisdom is the principal thing: therefore get wisdom: and with all thy getting get UNDERSTANDING."

(1.) If Blair chooses to contradict himself that is no business of ours.

(2.) "O! the moon is a brightly-lit body" is it! Professor Fowler said it "is a dark body." Ah! well, proceed. I suppose you will inform us if you ever saw "a dark globular body brightly lit, and whether or no it in any way resembled the moon. "And owing to the dazzling of the eye." Ahem! *which* "eye" please? Ah! I see you give *results!*" "Such a body always looks a little bigger than it is." Yes, I see, but *my* eyes are not dazzling, so go on. "So that *its* edge encroaches on the surrounding space." I suppose that is the astronomer's "infinite space?" Well, what next? THROUGH THIS UNREAL EDGE OF COURSE A STAR CAN BE SEEN." How very clever! But there, go on, "To prove your case"—do you mean "*your* case." *We* have no case. *We* ask Professor Fowler, *not* what *you* say we asked him—viz., "How was Jupiter seen through a dark body," but "If the moon is a dark body how was it that in the occultation of Jupiter by the moon, Jupiter was seen through this 'dark body,' positively seen through the mountains, crates, rivers, seas &c.?" How is it that these Professors, these Oracles of Modern, Theoretical, Mathematical, Geometrical Astronomy answer not? I'll tell you. The horizontality of water has shaven them of their locks and their strength has gone from them and they can do nothing save it be laugh at you for being so foolish as to attempt to put a wig on them to frighten us with. No, no, sir. *We* KNOW what *their* next action will be, for their strength shall return unto them for that purpose, and that purpose only—viz., the utter destruction of the globular theory. But proceed, please. "To prove your case you must produce an instance of a star being seen either through some part of the moon far from the edge." *Which* edge, please, "*its* edge," or the "*unreal* edge?" Proceed, please. "Or through the dark part of the moon." Then Professor Fowler is wrong in saying "the moon is a dark body," eh? You contradict him and say "the dark part of the moon." Then the moon is only *partially* dark. O, you are a Harper! Well, how is this "f r being far from the edge?"



Is it far enough, or is it too near the centre? That is not "poetic licence," but FACT, for it's a correct illustration of Jupiter as seen through the moon. Permit me to suggest that you write on this subject, as you have on others, to General Drayson, Sir Robert Ball, or even the Cambridge Profes or you once mentioned, and ask them to answer this question direct to us and it shall appear in our columns.

I am glad you notice our "very absurd argument" to the Rev. D. Nield about the *immovable* sun *moving*, for it proves you are as far from a discernment of what logic and truth is as you were six years ago! To prove that an immovable sun moves, you say you were "travelling from London to Birmingham, and you and your friends were trying to see the monument at Tring, when one of them said, "Those trees will

move out of the way in a moment." Then *you* add, "So they *did*." DID they? No, they *did* NOT. The train moved, not the trees. It is an illogical and false statement, the results of scientific teaching through school and college cramming which causes men to stultify the meaning of words and sentences to explain and understand (?) a false so-called science. Tell your friends they should have said, "We shall pass those trees in a moment."

This reminds me of a gentleman who once called on me, and in the course of conversation upon the same subject said, "Of course you believe in passive motion?" No, I replied, I do not, neither do I believe in so-called "retrogressive motion." But said he, "They are facts, known facts." I should like to know who proved them to be facts. Oh, said he, that is easily done. Can you do it, I asked? Oh, yes, he replied, and rising from his chair he took from the table a book, placed it on his hand, and with outstretched arm said, "There, sir, the book is now passive. That is a fact, is it not?" Yes, I said, that is a *demonstrated* fact. Now, said he, moving his arm at full length backward and forward, "*It* moves, and that is passive motion." Then I replied, "passive motion" is made out of a fact and a falsehood, and consequently the whole is absolutely false, for nothing is so dangerous and likely to mislead as error and truth mixed. *Vide* Gen. ii, "Ye shall NOT surely die." "*Not*" is a very small word, but it changed the truth of God into a lie." "*It*" is a very small word, but it changed a fact or that which was absolutely true into a falsehood! But, said the gentleman, I showed you two facts, and you say they constitute one falsehood! It is useless talking to you, sir, or trying to convince you of the facts of astronomy." "No sir, not in the least," I replied, "if they are what you call facts. But perhaps you will allow me to explain." "Well, I must really be going," he said. But before you go allow me to ask you to think this matter over. You said 'it,' the book, 'moves.' The book did *not* move, the book *cannot* move, for *it* is devoid of life or power to do so, hence the truth is *you* moved *the* book, therefore to speak correctly or logically you should have said the book is *being* moved."

We reproduce the cutting you sent us, as Hawkins is an apt illustration of the intellectual intoxication caused by science falsely so-called. The *only* way "a fellow c-caan't help getting carried off'sh feet," is by standing upon the vast non-revolving, non-rotating plane earth.

FIZZICAL JOGRAPHY.—Autocratic Policeman: "Strikes me, sir, there's something physically the matter with you." Hawkins (who is just getting home from business at 1.30 a.m.): "Quite right, pleeshman. Shofferin' from an attack of fizzical joagraphy." Autocratic Policeman: "Physical geography, sir? What way like?" Hawkins: "Well, ye see, pleeshman, th' earth trave'sh thro' spash 't such a fearful velosity, that a fellow c-caan't help gettin' carried off'sh feet now'n again." Both lose their gravity completely.

H. SPARTAN.—We are well informed upon the points mentioned in your ever-welcome letter. (1.) Lady Blount is no more "in favour of the science of Koreshanity" than you are yourself. She says, "I do *not* yet understand Koresh's cosmical teaching, and therefore cannot give *any* opinion on it." Doubtless she has great respect for Mr Morrow, and corresponded with him *before* he became a Koreshanite. (2.) Respecting "her letter in "F. S." for January, from which you quote, "We—*s.e.*, Mr Morrow and Koresh—are grateful for her kind words . . . and commendation of the *works and writings of Koresh*." She informs us that she "wrote to Mr Morrow in reply to *his* invitation to ask any questions that she wished to," and adds, "He has quoted *parts* of sentences (connecting them) from my *private* letter. In course of my letter I recollect mentioning to Mr Morrow that I was not yet prepared to endorse (especially openly) Koreshanity. What I meant for publication were my questions, and Mr Morrow has kindly promised these shall be inserted! I also said he could print (if desired) that I perceived that the teaching of Koresh was in *some* things good, and even better than I had ever heard. But I was particular in reference to his educational system and social reform." Both these appear to me very excellent. (3.) Yes, we are well aware that we are termed by them "the mongrel offspring of the Zetetic philosophy." One of the "mongrels" will have something to say on this subject before long. (4. "What do we think of the 'Geodetic Rectilineator.' Will it prove us wrong?" First, we think it is the last trump card of the great adversary of mankind, but never fear, we hold the ace and king—the Word of God, the horizontality of water.

No, it will not prove us wrong any more than an "equatorial telescope" does, and it once made a gentleman exclaim, "Why! in that way you CAN ACTUALLY SEE the curvature of the earth." *Leeds Mercury*, Dec. 20th, '92. You see the instrument is made to prove a foregone supposition. The Koreshan "Rectilincator" is made for the same purpose. They assume by a "geometrical proposition" that the earth is concave, and then talk about "a rail, one or two miles long, concaved eight inches to the mile." Who made these rails, and who looked along them? We know that they do *big* things in America, but we are inclined to think that the rail 2, or even 1 mile long, is too *long* even for a "cute Yankee." (5.) Suffice it for the present that we quote their own statements, "He (Koresh) comes as the Son of man . . . as the Shepperd, the Stone of Israel . . . as the WORD OF GOD . . . the Messenger of the Covenant, the High Priest and Mediator of the age of light and life." And then it is asked, "What will *you* do with him?" For the present, "curtain."

### ZETETIC NOTIFICATIONS.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec., post free, to any address in the postal union for 1s per year, in advance.

All monies for the Society must be paid direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Sumner Street, London, S.E.

We must request correspondents to be careful in addressing letters to the Secretary, as several letters have been delivered opened by other Mr Williams' living on Bankside. JOHN WILLIAMS, 32 Bankside, London, S.E., will insure safe delivery.

THE RECEIPT OF A COPY OF THIS JOURNAL FROM OUR SECRETARY, IS AN INVITATION TO SUBSCRIBE.

Will friends please notice that if this space  contains a BLUE PENCIL CROSS, it is an indication that YOUR SUBSCRIPTION IS DUE. A RED PENCIL CROSS indicates that your subscription *will be due before* the next issue.

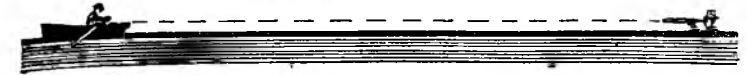
We regret that it was not stated in our last issue that this Journal would be enlarged to 28 p.p., hence the price, *post free*, is placed at 3d.

The Map we have been publishing at 2/, is at present "out of print."

Will friends in ordering books please notice that those only which are quoted on the cover of the last issued Journal are those only in stock, others having been sold out.

# —THE— EARTH—NOT A GLOBE—REVIEW.

SIX MILES.



Vol. IV "Parallax" proving the Surface of Water to be Horizontal.  
April-June 1884

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. IX.

"THE great majority of scientific writers and teachers commonly refer to the "time-honoured and universally-accepted law of gravitation" as if they were quite *unaware* that that law leaves many very serious difficulties still unsurmounted, and that, even among men of science themselves, it is by no means so universally accepted as it once was. . . . . It is absurd to hold that it universally applies to all phenomena which it is held to govern. It cannot be denied that, in the words of Samuel Laing, "The universe contains many forms of motion and many manifestations of energy, which cannot be explained by the laws of gravity. For instance, the runaway stars, the world of meteorites, the proper motions of molecules and atoms, and the requisite duration of solar heat to account for the undoubted facts of geology."

What is gravity? We are accustomed to speak of it as the one well-known and established fact of the universe; and yet of ITS REAL ESSENCE AND MODE OF OPERATION WE KNOW ABSOLUTELY NOTHING. Nay, worse! its nature appears to be so inscrutable to us, so far, that our accepted views and theories regarding it are either essentially self-contradictory, or are directly contradictory of the well-known and fundamental principles of physics. And, still worse! the blinding influence of prestige has so far prevented the great army of teachers and students of the subject from perceiving these vital and almost glaringly apparent contradictions.

What, then, is gravity? How does one mass of matter act upon another mass *without connection* and apparently without requiring time for the transmission of the impulse, however great the distance at which it acts? Is it a pushing or a pulling force? How is it so

No, it will not prove us wrong any more than an "equatorial telescope" does, and it once made a gentleman exclaim. "Why! in that way you CAN ACTUALLY SEE the curvature of the earth." *Leeds Mercury*, Dec. 20th, '92. You see the instrument is made to prove a foregone supposition. The Koreshan "Rectilincator" is made for the same purpose. They assume by a "geometrical proposition" that the earth is concave, and then talk about "a rail, one or two miles long, concaved eight inches to the mile." Who made these rails, and who looked along them? We know that they do *big* things in America, but we are inclined to think that the rail 2, or even 1 mile long, is too *long* even for a "cute Yankee." (5.) Suffice it for the present that we quote their own statements, "He (Kores) comes as the Son of man . . . as the Shepperd, the Stone of Israel . . . as the WORD OF GOD . . . the Messenger of the Covenant, the High Priest and Mediator of the age of light and life." And then it is asked, "What will *you* do with him?" For the present, "curtain."

### ZETETIC NOTIFICATIONS.

✉ Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec, post free, to any address in the postal union for 1s per year, in advance.

All monies for the Society must be paid direct to the Hon. Secretary and Treasurer, John Williams. Post Office Orders to be made payable at Sumner Street, London, S.E.

We must request correspondents to be careful in addressing letters to the Secretary, as several letters have been delivered opened by other Mr Williams' living on Bankside. JOHN WILLIAMS, 32 Bankside, London, S.E., will insure safe delivery.

THE RECEIPT OF A COPY OF THIS JOURNAL FROM OUR SECRETARY, IS AN INVITATION TO SUBSCRIBE.

Will friends please notice that if this space  contains a BLUE PENCIL CROSS, it is an indication that YOUR SUBSCRIPTION IS DUE. A RED PENCIL CROSS indicates that your subscription *will be due before* the next issue.

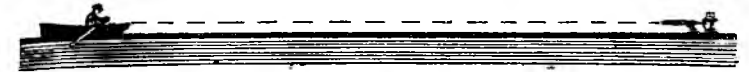
We regret that it was not stated in our last issue that this Journal would be enlarged to 28 p.p., hence the price, *post free*, is placed at 3d.

The Map we have been publishing at 2/, is at present "out of print."

Will friends in ordering books please notice that those only which are quoted on the cover of the last issued Journal are those only in stock, others having been sold out.

# —THE— EARTH-NOT A GLOBE-REVIEW.

SIX MILES.



Vol IV

"Parallax" proving the Surface of Water to be Horizontal.

April-June 1894

## "UNIVERSAL GRAVITATION, A PURE ASSUMPTION."

BY LEO CASTLE.

No. IX.

"THE great majority of scientific writers and teachers commonly refer to the "time-honoured and universally-accepted law of gravitation" as if they were quite *unaware* that that law leaves many very serious difficulties still unsurmounted, and that, even among men of science themselves, it is by no means so universally accepted as it once was. . . . . It is absurd to hold that it universally applies to all phenomena which it is held to govern. It cannot be denied that, in the words of Samuel Laing, "The universe contains many forms of motion and many manifestations of energy, which cannot be explained by the laws of gravity. For instance, the runaway stars, the world of meteorites, the proper motions of molecules and atoms, and the requisite duration of solar heat to account for the undoubted facts of geology."

What is gravity? We are accustomed to speak of it as the one well-known and established fact of the universe; and yet of ITS REAL ESSENCE AND MODE OF OPERATION WE KNOW ABSOLUTELY NOTHING. Nay, worse! its nature appears to be so inscrutable to us, so far, that our accepted views and theories regarding it are either essentially self-contradictory, or are directly contradictory of the well-known and fundamental principles of physics. And, still worse! the blinding influence of prestige has so far prevented the great army of teachers and students of the subject from perceiving these vital and almost glaringly apparent contradictions.

What, then, is gravity? How does one mass of matter act upon another mass *without connection* and apparently without requiring time for the transmission of the impulse, however great the distance at which it acts? Is it a pushing or a pulling force? How is it so

wonderfully radiated out in all directions into empty space, where it meets with no reciprocally attracting body? And, still more wonderful, why do we violate the law of the conservation of energy in its favour by postulating its infinite generation and manifestation, both in time and in space, by the merest particle of matter absolutely independent of any other external cause or condition? Would any person of intelligence claim that a material particle would, independently of any external cause, forever continue to generate any other form of energy, such as heat or light? And, if not, why do we make the sole exception in favour of the energy of gravity? As all the known physical properties of the material particle continually remain unchanged, does it really create this infinite supply of force out of nothing?

But let us pass from the innate nature of the mechanism of gravity to its application to gross matter in the visible universe. Professor Newcomb has shown by mathematical calculation that the gravitation of the whole universe, *assuming* it to contain 100,000,000 of stars, each five times larger than our Sun, would scarcely account for the one sixty-fourth of the velocity of 200 miles per second actually possessed by the star 1830 Groombridge. And yet the star Arcturus, whose volume is eleven times that of our sun, is said to move with a velocity of even 400 miles per second.

Passing again from these and many similar objections to the law of gravitation to be met with in almost every nook and corner of the nebular hypothesis, let us come down to a more familiar instance and inquire into the operation of that law in the case of the oceanic tides upon our own world. According to the law of gravitation, the Moon is the chief tide-producer; and yet, with strange perverseness, when the actions of the Sun and Moon are separated from each other, as upon the comparatively small surfaces covered by large lakes and inland seas, where the action of one of the bodies, owing to their periodical angular distances apart, is locked out by the surrounding land, we find that the tide corresponding to the Sun is much greater than that corresponding to the Moon. At Green Bay on Lake Michigan, for example, the scarcely appreciable lake tide is accumulated and magnified by the funnel-shaped waters of the bay, much as the oceanic tide is in the Bay of Fundy. The result is that *each morning and each evening regularly at about 7 o'clock*, there is a tide varying from five to eight inches in height, the two low waters occurring exactly intermediately, or between 11 and 2.30 o'clock. (See the *Milwaukee Sentinel* of August 17th, 1892.) Now these tides cannot possibly be caused by the Moon, because they do not conform to the Moon's movement at all, but on the contrary exactly to the movement of the Sun.

In fact the tide which actually does follow the Moon's movement is so much smaller than the other as to be barely noticeable; although, according to the law of gravitation, it ought to be about two and a half times greater than that of the Sun.

Again, regarding the tides of the Mediterranean Sea, in a paper read before the Paris Academy of Sciences, August 8, 1887, by M. Héraud of the hydrographic survey, we find—"These tides appear to be the most important and regular in the whole Mediterranean Basin. . . . They continually increase in magnitude as far as Gabes where they acquire a maximum of 2 metres at the mean spring tides. . . . *The tidal wave appears to come from the east, the mean period being apparently about 24 hours.* All the observed circumstances would seem to show that the *relation of the lunar to the solar tide is less than that of the absolute actions of the Sun and Moon.*" (*Nature*, xxxvi. 383.)

And in the same connection—"The relative part played by the Sun and Moon, as deduced from gravitational formulæ, does not quite agree with the observed phenomena of the daily tides. It is believed by many that the ordinary lunar tide, affecting mainly the oceanic envelope, is complicated by the presence of a terrene tide largely influenced by the Sun, and that the earth does, to an appreciable extent, yield twice in the twenty-four hours to the deforming force of solar gravitation." (*Nature*, xlvii. 30.) And still again, at the port of Kinneghow in Hainau—"It appears certain that there are two tidal waves a day." (*Nature*, xlv. 63). Here, then, we have *the law of gravitation directly contradicted by actual observation*; for it seems utterly absurd to suppose that, if the Moon is more than twice as powerful as a tide-producer as the Sun, the principal tidal wave would not follow the meridional movement of the former rather than that of the latter; and more especially so in the case of large isolated bodies of water, where the contrary is actually observed to take place.

But the grandest scientific miracle yet remains to be considered. According to the present tidal theory, the tidal wave originates upon the Earth's surface because the Moon pulls the water on the nearest surface of the Earth more than it does the Earth's centre, for the reason that that surface is nearer the moon than the latter point. The excess of the Moon's attraction upon the nearest surface, over that at the centre of the Earth, constitutes, therefore, the tide-raising force, which pulls the movable water away from the Earth's centre, and thus raises the tide. Now this tide-raising excess of the Moon's attraction is readily calculable. In fact, its amount has long ago been ascertained by Newton to be somewhat less than the one twelve-millionth

part of the Earth's own attraction, holding its surface waters to its centre. (Sir John Herschel. *Outlines of Astronomy*, p. 528, Note.) In other words, then, the present theory of gravitation requires us to believe that one unit of force pulling the waters of the Earth towards the Moon actually raises these waters several feet in direct opposition to the twelve million equal units of force pulling the waters in the opposite direction or towards the Earth's centre! It surely cannot be denied that the two forces are in direct opposition, because the Moon, the Earth's surface and the Earth's centre are supposed to be in a straight line; and in fact it is only in this situation that the Moon's maximum tide-raising force applies. For when the lines of action of the two forces become more and more inclined to each other, by the passage of the Earth's surface out of the straight line, the Moon's tide-raising force becomes smaller and smaller, until, when the two forces would act at right angles to each other, the tide-raising force would entirely disappear. The law, therefore, leaves us no alternative but to believe that, in this tidal tug of war, one unit of force pulling in one direction actually outpulls twelve million equal units of force pulling in the opposite direction! And yet the Newtons and Herschels, the Taits and Kelvins of physical science not only implicitly accept this absurdity as a fact, but actually make it the basis of profound astronomical calculations! What a commentary upon our boasted intellectual attainments!

I might go still further and show that, according to the generally accepted views of the condition of the Earth's interior, no oceanic tide could exist at all. For, if the Earth's interior is in a molten state, tides would originate there just as in the surface waters; and the bottom of the sea being thus elevated by the internal tide just to the same extent practically that the surface of the sea is similarly elevated, no oceanic tide whatever would be perceptible.

I need not here dwell on these objections to the alleged law of gravitation more in detail, as they are already fully discussed, together with many other important matters bearing upon this subject, in my recently published work, "Cosmical Evolution." But, even from these few briefly presented objections, does it not really seem as if our great scientific and philosophical thinkers are actually down among the hobby-riders of politics, religion, and even of fashion, and, with the gravest dignity and confidence, imperturbably riding a pet theory as absurd and crazy as can be found among them all?—Evan McLennan, "Notes and Queries," Sept., 1896.

(To be continued.)

\* Papers on the Tides will appear at the conclusion of this series of letters by the same gentleman.

## THE EFFECTS OF EVOLUTION EXPOSED

BY

"A FOOLISH THING OF THIS WORLD."

PART I.

[TO THE EDITOR OF *The Faith*.\*]

DEAR SIR,—In your "Notes," p. 445, of the current issue (Dec., 1896), you reproduce some extracts from the *Sunday Papers*, being the utterances of Professor G. G. Stokes.

Your object in quoting his utterances on "immortality" is evident, and quite in keeping with the object of *The Faith*. But I am at a loss to understand what your object is in quoting his utterances on the unfounded hypothesis of Evolution.

I notice you ask, "Is there still occasion for being afraid of Evolution?"

My reply is, first, no! because "God will make the quarrel of Scripture His own quarrel." Secondly, yes! There is the greatest occasion for being afraid, for God's people should not trust in man, but walk in God's Truth; in other words, they should be "doers of the Word and not hearers only." I trust you will for God's Truth sake give this letter your careful perusal, and, if possible, insert it in *The Faith*.

Professor Stokes says, "Evolution does not designate a cause, but a process."

Well, for "clearness of conception" let me ask, whoever saw an evolution? Where can one be seen in "process" now? When did the process commence? Where and when did the "process" of Involution, which is essential to the process of Evolution, takes place?

Professor Stokes must remember that "process" is a resultant or effect, therefore Cause is *inseparable* from it if absolute truth is the object. Consequently, if he intends by the above statement to *eliminate* Cause, he naturally exposes the illogical and untenable position of the hypothesis he is seeking to explain or defend! Or, are we to understand that Evolution teaches that "species" are the results of an uncaused "process?" "Process" is the direct outcome of Cause, and involves *intelligence, design, and power*, which necessarily involves personality. Is the cause (if it has a cause) of Evolution the Christian's

\*This letter was first sent to the Editor of the Mission Department of "The Faith." His reply and the reply from the Editorial Department of "The Faith" will be published in Part III.

God? Professor Stokes in substance answers in the affirmative by saying, "It is a process according to which the Divine will works in certain cases, that is all."

Yes, "that is all," and enough too of the sort! But *when* and *where* did the Divine Will ever work by such a "process?" The whole school of Evolutionists are dumb and cannot answer! Just what God declares of them in the Scriptures of Truth, saying, "I will destroy the wisdom of the wise, and will bring to nothing the understanding of the prudent." But perhaps, sir, you, or the editor of *The Faith*, will attempt an answer to my several questions.

In *The Faith* for February, 1896, the editor asserts that, "Our Sun formed the centre of this Universe, and around it stretched at respectful distances. . . . its seven planets—Earth, the Moon, Mars, Venus, Uranus, Jupiter, and Saturn, together with their Satellites. These *eight*. . . . formed one Kingdom, to be ruled over by one King, or Supreme Head, with a suitable Court. . . . Then followed, by the wonderful skill and power of Jehovah-Elohim, the creation (was it by the "process" of Evolution?) of a suitable Head to rule in so magnificent a sphere. . . . This being was to be the Head and Ruler over all the eight Worlds. . . . The name of this wonderful being was Lucifer. . . . What the Sun is to its planets, so was Lucifer to the various forms of life that were afterwards created, angelic, primeval, and human. . . . To Lucifer. . . . was delegated power and authority throughout the wide and wonderful system of these eight Worlds. . . . He had power. . . . to create and to destroy; to kill and to make alive; to set up and cast down. . . . Primeval man was probably his handiwork. . . . In Gen. i. 26 and ii. 7, Jehovah-Elohim is said to be the Creator of *man*, as known to us to-day, and as distinguished from primeval man. By parity of reasoning we may conclude that any previous human creation was the work of Lucifer."

Is this "contending for the faith, once for all delivered unto the saints," or, is it contending for "science, falsely so-called," as first originated by Pythagoras, the Sun-worshipper, after he had spent some time in hell? If it is the former, and not the latter, I should like to know where he gets his information from about (to use his own distinguishing term) "primeval man," i.e., a man created by Lucifer? The Scriptures nowhere teach that "power to create" was ever delegated or conditionally entrusted by God to ANY *created intelligence*, therefore, Lucifer never created "primeval" or any other "man." But the Scriptures do authoritatively assert *who* it was that did create *the* (one

and *only*) World and all things therein, organic and inorganic. Who will dare attempt to gainsay the following declarations of God the Holy Spirit?

"By Him (Christ) were ALL *things created*, that are in heaven, and that are in earth, visible and invisible. . . . ALL *things were CREATED BY HIM and FOR HIM* (not BY and FOR Lucifer!). . . . and BY HIM ALL THINGS consist." Col. i. 16-17. "All things were made by Him, and *without Him was not anything made that was made*. . . . The World (not worlds) was made by Him." St. John i. 3, 10.; Gen. ii., iii. Compare Ps. xxxiii. 6; Rom. xi. 36; 1 Cor. viii. 6; Eph. iii. 9. "God created man upon the earth." Deut. iv. 32; Neh. ix. 6; Rev. iv. 11, x. 6; Isa. xlii. 5.

Yes, sir, according to Scripture Adam was "THE FIRST MAN," 1 Cor. xv. 45, 47; 1 Tim. ii. 13; he is also called son, or offspring, of God." Luke iii. 38; Acts xvii. 28, 29; not son, or offspring, of an ape. Adam was the primeval—original—*first* in order—or, as God in the Scripture of Truth puts it, "Adam was *first* formed, *then* Eve," and she is declared to be "the mother of *all* living." In Luke iii. we have God the Holy Spirit inditing absolute facts about the creation of man, and the geneological table there given is the utter refutation of *all* that which learned Professors of Science have written to the contrary. There man is presented as "son of man," "son of God," and that surely is a state of unsurpassable honour, beyond which no thought either angelic or human can exceed, for, the Man, Christ Jesus, is at one end, and Adam at the other, and of him it is said by the Holy Spirit, "In the image of God created He him." Gen. i. 27. I assert that these eight words of God absolutely exposes the hypothesis of Evolution, as having its origination in the council-chamber of Beelzebub, and is now propagated on earth in direct opposition to, and contradiction of God's Holy Word.

I am sure, sir, that if the unscriptural assertions of science, "falsely so-called," were not accepted without question, or investigation, such statements would never have been made as those quoted from *The Faith*.

The Word of God nowhere teaches a plurality of Worlds. We read that "*the* World was made by Him," and that "He formed *it* to be inhabited." St. John i. 10; Isa. xlv. 18.

In *The Faith* (April, 1896) we read, "His lie had been preferred by the foolish pair, before God's *Truth*." Shall *we* prefer His lie of Evolution to-day before God's *Truth*, because it is clothed in the garb of "Science, falsely so-called?" His lie in Eden consisted in making



God a liar. Man forfeited his God-given inheritance by his insensate folly in accepting and acting upon Satan's smooth tongued proposition. Are we doing the same to-day? I think, sir, that when you have carefully perused this letter you will see that Plane Earth teaching is something vastly different to what you have hitherto thought it to be.

"Modern Science," as J. Page Hopps, in the "Daily Chronicle" (Nov. 9th, 1896), says, "Changes our natural way of thinking about God's revelation of Himself." *Ergo*, "Modern Science," is the devil's lie.

Gen. i., ii., is Divine revelation and history, therefore, true history; consequently not a "poem" as some "scientists" and "theologians" have asserted. It is absolutely literal and highly scientific, because it is the Divinely inspired account of the Creation of the heavens, the earth, and ALL *things therein*, by Him we now know as the Man Christ Jesus. And here I would ask what better is the hypothesis of Geology; seeing that "Evolution is *the central idea* of it?" And please observe, for these quotations are from the pen of a teacher and defender of Evolution—"it is this idea (*idea*, mind) alone which makes Geology a distinct science. This is the cohesive principle which unites and gives cohesion to all the scattered facts of Geology; which cements what would otherwise be a mere incoherent pile of rubbish into a solid and substantial edifice." *Science Siftings*, January 16th, 1892, p. 203. Hence, you see, Evolution and Geology stand or fall together, and as the Globe Theory of Modern Astronomy is the basis of the Evolution hypothesis (the Globe, "*supposed* to have been originally evolved from a mass of gas in rotation"), the refutation of the globular hypothesis is the utter overthrow of ALL man's wisdom, falsely called "Science." Small wonder then that it is declared by Jehovah-Elohim, "That which is highly esteemed among men is an abomination in the sight of the Lord." Luke xvi. 15. Truly as we read in the first letter on "Satan and Sorrow," "one may well shudder at the daring defiance of God's revealed will and purpose, which is so painfully apparent in modern popular literature." For instance, if Adam was the offspring of an ape, what about the Man Christ Jesus, who was made flesh and born of the Virgin Mary? Christians, will you accept a speculating hypothesis as to man's origin that degrades your Saviour to the level of the beasts of the field? Say not, this is "pushing to the extreme." I reply no, it is the logical common-sense and faithful sequence. You say it is blasphemy; I reply—yes, it is, and reduces the teachers and acceptors of it lower than the status of Peter when he denied "the Holy and Just One." And be it noted, no descendant of a beast can be termed "Holy."

I know that scientists would very kindly relieve God of personal and constant operation, *supposing* the world and all things therein to have been evolved and supplied at the outset with "laws" which would evolve themselves in the sequence of events, without aid from personal agency. The position which seeks to embrace Christianity and Evolution, or its offspring, Geology, or the mother of them both, modern Astronomy, is an untenable as well as an unphilosophic one. Law denotes mode of action, therefore, law separated from the continuous active exercise of an agent is absolutely nothing: hence it is evident that the existence of law and order proves conclusively the continual putting forth of power by the Author of Nature, and this was the teaching of Christ when He said, "My Father worketh hitherto and I work."

(*To be continued.*)

## THE SURFACE OF WATER.

BY LIUETENANT MIDDLETON, R.N.

A SERIES OF LETTERS WRITTEN IN 1871.

No. II.

SIR,—Kindly permit me in all humility to arouse, wake up, alarm, terrify, *freeze* Globe-ite with the *burning* sensation that I wonder!—yes, I wonder. Would Globe-ite be sensitively pricked up to a distant rumbling, mighty roaring, all-earth-clashing, sea-nonconvexing, air-splitting, *gentle* ear-tickler? Then let Globe-ite be aware that I quiver, shake, nay—rattle with amazement to know, would he (Globe-ite) allow, recognize, and determinedly swear that there is such a thing as a PERPENDICULAR? Swear, Globe-ite, swear! Affirm yea! It is affirmed! Globe-ite has graciously condescended that he acknowledges an ordinance of nature (according to position) vertical, upright, perpendicular, or otherwise.

The affirmation granted, I will now convulsively venture to rigidly assert that *two* perpendiculars may exist! Bolder and more adventuresome I shriek on the high tenor C in an overwhelmingly commanding, foe-bewildering whisper, that man, Globe-ite or Plane-ite, may insist on as many perpendiculars as he likes *actually* to pay for, *mythically* to possess. Perpendicular granted! The Bedford Canal granted! Business challenges attention; and that business, the measuring of the surface of water with a plumb-line. But *firstly*, I must request Globe-ite to be serious, choleraically serious; that type being the most woeful

representative of earnest solemnity, and promising a short fusillade which may possibly strike conviction of error, and assist the reception of the following simple truths.

Firstly, that perpendicular containing or allowing of an extended union which *everywhere* forms an angle of 90 degrees, either *from* the primary point of junction or *with* an attached plumb-line,—must in themselves be perpendiculars parallel to each other, and their line of union will be horizontal, and in *the same plane*.

Secondly, that any number of *such* unions between the said perpendiculars must be horizontal to each other.

Thirdly, that any area which is equidistant throughout from any one horizontal line must in itself be horizontal, or, in other words, *perfectly level*, and in *the same plane throughout*. To measure the surface of water with a plumb-line is to a certain extent a matter of uncertainty, from the fact that water is usually in motion, and such motion will disarrange the basis of operation, namely, the perpendiculars, and will further swell up to the plumb-line and render anything more than a rough approximation to a level out of the question: at the same time be it remembered that the point is *not necessarily* to show a *level*, but to show *the arc of curvature an impossibility* as regards the earth's general shape. The difference between curvature and level being so enormous—THE CONVEX AND LEVEL BEING SO UTTERLY OPPOSED—any *real* approximation to a level is sufficient to contradict any assumed curvature. The law of curvature being the square of the distance multiplied by eight inches, the curvature in six miles *is* twenty-four feet: the square of distance 6 times 6—36: 36 multiplied by 8 inches—288 inches—24 feet. The law of curvature as above stated being in itself an approximation, the true curvature in six miles would be a few inches less than 24 feet: but the experimentalist, to support curvature, must certainly show a fall in six miles, which shall approximate closely to 24 feet. On the other hand, the experimentalists, to controvert the absurdity of curvature, need only show an approximation to a level on the said six miles of water: **taking 23 feet as the approximation for 24 feet of curvature**, and allowing 12 inches rise or fall in six miles, as an approximation to a level, it is very plain that the one approximation is utterly fatal to the other, and that either will be sufficient as a *crucial test* of the superficial shape of the said six miles of water, and consequently of the whole ocean, in that, wide expanses of water, called lakes or seas, *must* conform to one general law as regards their superficial area.

Again, the curvature theories suffer this disadvantage, it *must*

*exist* to the *greatest nicety*; otherwise circles of curvature would overlap circles of curvature. The plane superficies, on the other hand, allows of the *rise* and *fall* actually necessary to meet the exigencies of tides, and the ordinary flow of the water from gales of wind, as also from the circulation produced by change of temperature.

But now for the experiment, one which, if a little tedious, will be found to be most convincing. A lake or sea being inconvenient for the test by plumb-line, in that a heaving base would surely allow of a very rough approximation, a canal is chosen, in that it offers a solid foundation on its banks, and consequently I refer my reader to the Bedford Canal.

Take a number of perpendiculars, posts or otherwise. Erect No. 1 perpendicular on a bank, secure it *firmly* by a side support, and test it by a plumb-line to see that it is *truly* perpendicular. Erect perpendicular No. 2 on the *opposite* bank, and stretch a wire from one to the other across the water—such wire forming an angle of 90 degrees with either post, and with a plumb-line dropped from any part of it to the water. Continue a line of posts along the bank, throughout the six miles, or such shorter distance as shall be considered satisfactory. Test each post as perpendicular and parallel to post No. 1, such test being performed by a wire junction, as in the case of the first two posts, all such wire junction being in the same plane. Distance being determined, place the last post on the opposite side of the canal; again extend the wire across the canal; again testing the perpendicularity of the posts and the angularity of the wire junction. The experiment being duly carried out, the last wire will be perforce in the same plane as the original wire from posts Nos. 1 and 2. Now remembering that any area equidistant throughout from any one horizontal line *must* in itself be horizontal, or, in other words, *perfectly level*, and in the same plane throughout, let a plumb-line be dropped from wire No. 1 to the water, the number of feet and inches being carefully noted; again let a plumb-line be dropped from the last wire to the water, the number of feet and inches being carefully noted; then, the two measurements coinciding, the miles of water in between have a horizontal surface parallel to the wires. The two plumb distances *must coincide*, or closely approximate; and the general surface of still water must be a plane, as anyone may prove for himself.

(To be continued.)

“To suppose that there are millions of incandescent bodies, fiery globes, scattered through the Universe, is an idea so extravagant that we may well wonder how it could have become so prevalent. Its very preposterousness ought to excite suspicions of its truth, and justify the imputation of its absurdity.”—*The New Principia*, p. 15.

## THE MOSAIC COSMOGONY PROVED TO BE A FACT

### MODERN ASTRONOMY SHOWN TO BE A FABLE.

BY INVESTIGATOR.

It may seem very late in the day to inquire whether the respective claims of these two confessedly antagonistic systems are as well understood as they ought to be. The unaccountable silence and reserve of the few approvers of the Scriptural cosmogonies, and the persistent and universal adoption of the modern theories, have resulted in the too generally received opinion, that the former are no longer defensible against the overwhelming multitudes who advocate and endorse the doctrines of the more modern astronomers.

It can be hardly necessary, however, to show that in the inspired records, the distinction between them is wide and fundamental, and irreconcilable. In the very first verse of the Bible, and in innumerable other instances, the two systems are severally referred to as having no connection whatever, in kind, or in degree. The "Heaven and the Earth" are invariably associated together, while the sun, moon, and stars, is, from the outset, spoken of as distinct, and wholly subservient, secondary, and inferior in every respect to the earth and its belongings. This very striking diversity between the two systems is not expressed occasionally or inferentially; it is unmistakably and prominently insisted on from the very first line, through every page of the Sacred Volume; nor does there occur one solitary exception to which our opponents can lay claim! Is this strongly pronounced and oft repeated distinction the result of accident or ignorance? Did the Almighty Himself not know whether the earth or the sun ought to be the more intimately associated with the Heaven of His presence? But it is useless insisting on what our opponents do not deny—that the Bible furnishes them with no support whatever; and they can only fall back upon the hackneyed plea that "the Bible makes no pretension to teach science," or to "speak with scientific accuracy." Certainly not, if modern theories are at all worthy of the name of science, and professional phraseology is descriptive of facts and indisputable truths! But the object of this paper is to show that these modern scientists have yet to make good their claim to be considered the only reliable authority upon these subjects. They certainly have no lack of the most specious arguments; and if their foregone conclusions can be regarded as logically conclusive, where no premises are referred to, and where first principles are purposely ignored, then it may be useless to inquire further on the subject. But Copernicus and Kepler, and Newton,

made the vague and baseless surmises of Pythagoras, and one or two of his Pagan contemporaries, the sole ground-work of their vaunted solar system! If these heathen philosophers had practically proved, and left their proofs on record, that the earth on which they lived was really spherical, or had any possible analogy to the planetary orbs, and that it had no material support from above or beneath, but, nevertheless, had not possessed the skill or sufficient inventive genius to proceed any further, there would then certainly have been a very great field for the display of the superior ingenuity and mathematical talents of such minds as those of Kepler and Newton. But these grand intellects were all of them building, without any extravagance of language, a series of castles, in the air! They set out with and built up their whole system on the *assumed* correctness of the Pagan suggestion, that the earth is a planet or spherical body, floating unsupported in space; though not one of them ever troubled himself to determine, from that day to the present, whether this curious conception was a fact or a fable, or have they ever endeavoured to ascertain or to establish the soundness of their fundamental principles! If solid bodies will, under any known conditions, float unsupported in space; if, by the aid of the spectro-scope, or any other curious contrivance, it can reasonably and rationally be inferred that such an immaterial and luminous body as the sun is capable, at a distance of nearly one hundred million miles, of exerting such an extraordinary sustaining or attractive power over solid matter of indescribable ponderosity, as to keep it floating in an horizontal direction, while at the same time it is being hurled round by centrifugal force, in a circular orbit, at the inconceivable velocity of three or four times quicker than a flash of lightning, then we will admit that Newton would have had some grounds for his reckless adoption and clever arrangement of the various accessories essential to the completion of his "mathematical system." But his conclusions were too hastily arrived at, his premises were not examined or asked for, and his conditions were never tested for an instant, neither were any of the coincidences attending it ever been understood or sought to be explained! And, what is the most crushing deficiency of all, that every single practical test, that ingenuity could devise or the agony of despair suggest, has, most unmistakably, proved the very reverse of what the theory required! Fiery or luminous gases have never, hitherto, been shown to possess any magnetic or attractive power; solid bodies have never been known to float or revolve unsupported in space; and the curve, which is absolutely essential to the formation of a globe, seems to be, most unaccountably, the one only shape that the Astronomer never has found, even on land, much less on water; and, in every aspect in which it may be viewed, it is found to be at once contrary to the ex-

plicit and unmistakable language of Scripture, the dictates of reason and common sense, as well as to every fact that the most prejudiced advocate of the system could devise or employ.

Now, on what plea can such an equivocal and hitherto unproved system of cosmogony be adhered to? Are we justified in such a practical and prosaic age as the present in retaining what we dare not defend, what we cannot explain, and, whilst it is making us a nation of infidels and scoffers at inspiration, is a disgrace to our civilization and a slur upon our very humanity itself? The one fact that there is not a single scientific professor that would venture openly to discuss, or attempt to elucidate the grounds on which it was originally founded or sought to be established, ought to convince us that such an indefensible system ought no longer to be tolerated, much less made compulsory in our educational establishments. Nothing can long uphold a theory which exhibits such a dread of inquiry, or serve to prop up a system, the ultimate overthrow of which, its own inherent rottenness and absurdity, have rendered inevitable.

### A VINDICATION OF THE DIVINE COSMOGONY.

BY JOHN DOVE, M.A. (1757.)

MY LORD,

Having read the writings of the Mystics, Mythologists, and Deists, I was greatly bewildered thereby; but most of all, by the answers to the last; for I confess I received more damage by the lame defences of Christianity, than by the shrewdest attacks of its enemies. Thus confused, I abandoned my previous course of reading, and applied myself to the scientific and natural philosophers, and the more modern commentators of Scripture. They bewildered me ten times more! The philosophers, I found, taught a lie for truth; and the commentators granted more than the moral philosophers asked, and finding their own artillery turned against them, they were forced to go over to the enemy's camp.

I was simply an inquiring spectator till past the 45th year of my life; nor knew who was right or wrong, but was strongly inclined to the idea that they were all equally astray; because I never could understand how an infinitely wise God could create a world of intelligent beings and leave them to be groping in the dark, as I was convinced the majority of them were.

In the first place, I felt assured that it was impossible that the Word of God and His works ever could disagree! Their disagreement

once granted, there ends all certainty in divinity and philosophy forever. To see and be able to demonstrate this agreement is the height and summit of learning; and all learning that has not that tendency, as it smothers the mind in ignorance, so it plunges its professors in doubt and confusion. Those, therefore, whose earth-born, homespun schemes, whose skill is employed in destroying or resisting this divine and important connexion, by setting up a standard of natural philosophy, which puts a control upon common sense as well as on the Scriptures,—a standard of moral fitness, and making revelation stoop to it—a law of nature as the foundation of Christianity and the revelation of God—I cannot help comparing to owls who arraign the eagle for blindness, and in the twilight try him at their own bar. How far this has been the case from the publication of a mathematical *Principia* and continues to be the case still, and the fruits of it have been a deluge of infidelity and every conceivable blasphemy, till superstition is reduced to a system, and gloried in and paraded as a superior gospel; and this your Lordship cannot but have observed. And as it is as much in your Lordship's power, as it is your proper province, yea, your bounden duty, to lead us out of this gloom, I doubt not that you will exert yourself to restore to us the light and liberty of the true Gospel, and thereby save a once glorious kingdom, now sinking fast into the grossest heathenism.

I have conversed in my time with a great many learned men, and, for more than twenty years past, never forgot to inquire of them concerning those curious phenomena—the “laws of nature,”—which mean nothing more than a kind of hap-hazard sort of substitute for the Divine Creator. Without any presumption, I profess to be able to distinguish between the truth and the falsity of anything in the written revelation of God, and between reason and romance, and between truth and fiction generally. Having cast off many prejudices of my education, I hope I have embraced no dangerous ones in their stead.

I presume, my Lord, that the written revelation of God was given to be the rule of our faith and practice, to curb our enthusiasms, to regulate our researches, and to restrain our tendency to improve upon His works. And, since it is the happiness of each rational creature to understand the ways and works of God, it is inconceivable to think that the teaching of his revelation should not effect this end better than the whimsical “laws of nature” and pretended fitness of things, which every man makes unfit as soon as he dislikes their fitness.

I have for many years carefully observed the gradations of infidelity, and have seen many a man who had had a religious education and feared to behave ill, by hearing first one and then another sneer at

the Bible, in a little time cast off all religion, plead the right of private judgment, and utter blasphemies I dare not repeat.

They almost invariably begin with doubts about the authenticity of the history of Moses and the origin of his revelation, and then pretending to be convinced that he knew nothing of the matters he wrote about, that the Prophets were fortune-tellers, the Apostles cheats, Christianity a deception, and all revelation a dream. If your Lordship conceives I have dashed the description with too much bitter, I assure you I have greatly underseasoned it. You will not I trust, regard me as an enthusiast or a fanatic, for I am a sincere Protestant and a true believer in the written revelation of God, and a cordial well-wisher and consistent member of the Church of England, as by law established; so no man can construe this as written to affront your Lordship or any other man. And that you may be enabled by your Lord and Master to exert yourself to stem that deluge of infidelity that is fast sweeping us away, is the earnest wish and prayer of

Your Lordship's humble Servant,

JOHN DOVE.

To the Right Rev. the Bishop of Oxford, A.D. 1757.

## THE PHILOSOPHY OF THE BIBLE.

### CHAPTER I.\*

HAPPY would it be if men would forbear writing till they could publish something for the benefit of their readers; nor ever leave anything unreasonable or false upon record. He that aims not at the first and to avoid the last, is not an honest man; nor while he neglects the Law of God or His Works, or sees not their connexion, will he ever be able to teach divinity or philosophy. The evidence for the former will be concealed, and though he may seem to have nature before him, he goes not the right way to apprehend her; he is still in pursuit, but will never overtake his object; for while he considers God and Nature aliens,—His Word and His Works contrary, he may wrangle about problems, state his conjectures, digest them into exact method, and make them appear fair and plausible, it will leave him hungry after all, and mankind none the better for his labours.

There is no MODERN PHILOSOPHY that has, as yet, perfectly and satisfactorily illustrated the harmony between God's Word and His Works. But it is the only true philosophy and the only true religion; for without the intelligent perception of this union there can be no

\* Capitals are ours. Italics are original.

spiritual or eternal life. I will in the following pages undertake to show:—1. That the doctrine of a moral "law of nature," is not to be found in Scripture, and is contrary to reason. 2. That the immediate agency and providence of God is founded on the Scriptures, and is strictly conformable to our reason.

It will be granted, our senses are not infallible, and that our reason is imperfect. This affords an illustration that we want the help of revelation; with that help, and not by "the law of nature," we may discover the creative wisdom of God, and all other things which the ingenuity of man cannot conceive. The histories of all past time prove that all knowledge worthy of the name, was derived from the Divine or Mosaic system; and the more remote men are from that fountain, and the more they swerve from that plan, the wilder are their systems of physical laws as well as of religion. The modern infidel plan of ridiculing everything sacred and divine is, therefore, not only extremely foolish, but it must infallibly end in unutterable confusion and discomfiture.

I mention these things to show what a dangerous course is the neglect of the Scriptures and the alarming spread of infidelity have had upon our literature and philosophy. So that to remain ignorant of their true meaning, all other learning must leave us miserable fools; and, in demonstration of this, I need only point to the infidel teachers of the present age; they will be found as unhappy as they are ignorant; and as they refuse to be taught by that revelation that God has given us, so they must remain groping in darkness, though the light is shining all around them.

Blush, then, ye philosophers, drop your pride, search the Scriptures, submit to be taught by your Maker, so that you may be delivered from your ignorance. In the Scriptures, you will soon see, at least you may, that those parts of Nature that we have any concern with and which lie beyond the reach of our senses, are therein revealed and made plain, to assist and improve our minds; and those parts of nature which lie more within the reach of our understandings, and with which we may be more familiar, *mutually explain the Scriptures*. For in them we are frequently referred to the more abstruse parts of nature; and when that is the case, we never fail to find them explained, and with which not to be acquainted, is our shame and our disgrace. And, unless these be taken in their proper connexion, they are, both of them not only obscure but unintelligible. Wherefore, to suppose a man with his rabbinical learning, his heathen Greek, his inborn light of nature, his fitness of things, without a PRACTICAL KNOWLEDGE of physical nature, derived from or supported by Scripture,

is as absurd as to find a cat able to catch fish in the middle of the Atlantic. And the man who does not see this, and yet pretends to be a man of learning, is past cure; and this must be the case of every man who rejects revelation; for no man ever yet was compelled to reject it on evidence! And those who call themselves reasonable men, and at the same time reject the original fountain of instruction, to follow their own wild imaginations, is like the sailor who throws his compass overboard to guess at the course, and looking into his shoes to find the longitude at sea.

THE WHOLE SYSTEM OF MODERN PHILOSOPHY, EXCEPT THAT WHICH AGREES WITH MOSES, IS BUT A REBELLION AGAINST NATURE, A BLASPHEMY AGAINST THE GOD OF NATURE, AND A PROOF OF THE WEAKNESS OF OUR OWN UNDERSTANDING.

Sir Isaac Newton and a Rev. Mr. Clark wriggled themselves into reputation, and flourished in the beginning of the present century; the former a natural philosopher, the latter as a divine. THE SYSTEM OF THE FORMER HAS NOTHING NATURAL ABOUT IT, but is a cobweb of his own weaving, of no consistence, as has been PROVED by men of learning and skill, who have been jeered at and abused for attempting to establish Truth, and justify the ways of God to man. The one attempted to realise HIS OWN IMAGINATIONS, AND TO PROVE THEIR TRUTH BY HIS MATHEMATICS, BUT NEVER SUCCEEDED, AND TO REASON BACKWARDS, A CERTAIN INDICATION OF HIS BEING A STRANGER TO THE VERY ELEMENTS OF SOUND LOGIC, AND OF HIS NOT BEING ABLE TO REASON AT ALL.

There is a supreme pleasure in surveying the works of God; it fills the soul with inexpressible admiration and reverential delight; but it is sad to see their magnificence diminished or misrepresented, the facts of nature ignored, her principles attacked, the sacred truths of God seemingly exploded, and men's vain imagination established in their room. This irritates the pious mind, rouses the soul, and excites her to oppose such fables and deceits.

How it should happen that Moses, who was Divinely inspired by God and who once had the greatest reputation for learning of any man upon earth, should fall into the disgrace he is in at present, so as to be held in contempt by the most ignorant and profane upstart, is hard to be accounted for but by those who know the human heart, which I conceive our new fangled philosophers neither know nor acknowledge.

But his philosophy can never be overthrown. Had these profound geniuses CONSULTED THE SCRIPTURES AND THE TRUTH OF NATURE, THEY WOULD HAVE SEEN THEIR WHOLE SYSTEM TO BE A SENSELESS BAUBLE AND CONTRARY TO EVERY FACT TO WHICH THEY COULD APPEAL.

Our wise translators could not have understood the Hebrew when they made Job say—Chap. xxvi. 7., "He stretcheth the North over the Empty Place, and hangeth the Earth upon Nothing." But Job says "He stretcheth the North upon *Tolu* (*i.e.*, desolation), and hangeth the Earth upon *Baljamah*;" for which there is no very literal translation, but we may describe it as "the firmament of His power." See the same word in Ps. cl., and other places.

And as the Scriptures declare this in the plainest language, there can be no doubt that our forefathers understood it so, till in later "enlightened times," the miraculous power of gravity was introduced, which is intended, I believe, to pull all and everything to the centre by a force in proportion to the quantity of matter in a body, and with out any known or visible cause; and for this imaginary device, we are to take Sir Isaac Newton's bare word,—reject the first mechanical law of nature—give up our senses and our reason too, every moment,—and, with a sturdy faith give Sir Isaac Newton credit for knowing more than the Creator himself!

When the present theory of philosophy is contrasted with the revealed system, it would be considered as an experiment to try the credulity of mankind, for it is as contrary to reason and common sense, as the doctrine of transubstantiation, nor can I think there is one man in Europe that seriously believes it, and I am perfectly certain there is *no man on earth can prove it to be true*: and its inventor, Newton, was, at last, so far convinced of this, that he confessed as much, as may be seen by comparing the various editions of his Optics, published in his lifetime.

It will, no doubt, be inquired whether I understand Sir Isaac Newton's philosophy? No! No more than I understand the anatomy of a spectre; but I perfectly understand that a spectre has no bones; and I as perfectly understand Sir Isaac Newton's PHILOSOPHY IS AS DEVOID OF TRUTH, OF REASON AND PROOF, as a spectre is of bones; and his warmest advocates have confessed that they do not understand him, while it is quite out of their power to prove that I do not understand Moses.

It must be allowed, Sir Isaac Newton was good at mathematics, but he certainly mistook their use, when he applied them to ascertain



distances, diameters, densities of the heavenly bodies; for by the disagreement of his followers, in these points, we are obliged to conclude, they knew nothing at all about them. Mathematics are of excellent use when employed about their proper objects; but were never designed to rob the professors of common sense, and to fill the vulgar mind with wonder. I remember to have read of a Dutch philosopher, who pretended to tell, by the mathematics, how many particles of light flow from an inch of candle, of one inch diameter in an hour; with other like whims. I knew a famous one, who thought his tailor a fool, because he could not make him a suit of clothes by measuring his thumb. Many more instances I could give, which engages me to believe they are not all conjurors, and that a goose, when she passes under the lintel of the barn door, and lowers her head for fear of it, is as good a judge of the height of the lintel, as the best mathematician in Europe is of the distance of the sun from the earth, and that all the parade and fuss we have had about it, is merely theoretical; for they pooh at the difference of fifty million miles as if it were a difference of only fifty inches; and when you express any surprise at their inability to secure greater accuracy, only treat you with contempt, for not knowing that in such immense distances, millions were but as hairs' breadths.

Therefore give me leave to ask, whether it is possible to make common sense of Scripture, till this lumber be parted with? For I assert it is impossible for any man to be a deist in creed, when he understands the genuine simplicity of the Hebrew records, and very difficult to avoid it in its present disguise.

It cannot be truly said that the Hebrew language has been thoroughly understood since the apostolic age; which may be one reason of that confusion in sentiment, which has distracted the church from that day to this, and the philosophers, too, who have exploded the Scriptures and followed the superstitions of the heathen.

Were the veil taken away from the philosophers' eyes, the Scriptures would appear worthy of the Wisdom of God in giving them to us; for with all the obscurity with which artful men have darkened them, they exceed all other books in their original sublimity of style, clearness of ideas, AND ACCURACY OF THEIR FACTS.

*(To be concluded in our next.)*

### ANSWERS TO CORRESPONDENTS.

All Letters to the Editor must be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. All letters *must* be prepaid and addressed to

MR J. WILLIAMS,  
96 ARKWRIGHT STREET, NOTTINGHAM.

### BIBLICAL, SCIENTIFIC, & NATURAL COSMOGONY.

*Being the substance of a Lecture delivered on board the U.S.S "Goth" in Algoa Bay, on 20th May, 1895.*

By T.W.

IN every matter with which Knowledge stands connected, prejudice knows no bounds, and when called upon to "give up the ghost," makes a determined stand, and always "dies hard." The subject I have to speak upon to-night is one which has exercised the minds of men from the earliest times. Before the 15th century "earth's millions" had ever been content to be satisfied with the facts of the Sun's motion and the Earth's immobility. These things could be seen and were therefore believed. Since those simple days, however, men with theories, as startling as they were new, have appeared. They declared that sentient beings could no longer trust their eyesight, being under an optical delusion as to the Sun's motion and the Earth's immobility. They further asserted that the Sun was "immovable" in a far-off place they dubbed "space;" that that Luminary was many millions of miles distant from the "Planet," called "our globe;" and many, many times its size; and that "our globe" was flying away in "space" at a terrific rate. As time wore on, other wiseacres arose and enlarged upon the theoretical teaching of their "predecessors in office," until to-day we have an hypothetical system of "Astronomy," the knowledge of which, it is pretended, only giant minds can attain to! Prejudice in these matters has such a hold on the minds of men who have been taught to "learn on credit and on trust believe" without ever having practically tested the assertions made, that I can only hope to present the other side of the picture to you without expecting to influence many in a direction they have been taught to believe is the wrong one. I am determined, however, to say nothing that I am not prepared to prove, and I invite the severest criticism and the most searching investigation. I shall be happy to reply to questions, or to enter into debate with any one present, on the points touched upon, provided always that temperate language is used and the ordinary rules of courtesy observed.

BIBLICAL.

It is plain from the Holy Scriptures that the Earth is resting on foundations; that it has no revolving motion whatever, and that it cannot be moved; that the Sun revolves above and around the Earth, and that all the luminaries we see in the heavens are there for the special purpose of serving the Earth. To these facts the following passages, among many others, testify:—Gen. i. 16-18; 1 Sam. ii. 8; Pss. cii. 25, xcvi. 10, xxiv. 2, cxxxvi. 6, xix. 1-6; Micah vi. 2; Job xxxviii. 4-6; Jer. xxxi. 37; 2 Kings xx. 11; Ecc. i. 5; Joshua x. 12-13.

So much for Biblical Cosmogony. Let us now see what "SCIENCE" (so-called) has to say on the matter.

We are all acquainted with the school-book theories written by the "learned," and illustrated in attractive form for the comprehension of the young. Much is taught in these books, and sometimes a little is attempted to be proved; but, I venture to say, when we look at them with the aid of our adult common sense and in the light of experience gained since school days, we shall find nothing, or next to nothing, practically proven.

The present is a favourable opportunity for discussing the subject of NAVIGATION in relation to the shape of the world. It is generally supposed, even by the experienced, that the rules laid down in Navigation Works for the guidance of the Mariner, are those which apply to a globular surface. That the very opposite is really the case, I shall proceed to prove from practical experience. I affirm that the rules in such books are really those required for ascertaining a ship's position on the surface of the ocean, which surface, when at rest, is LEVEL—HORIZONTAL, and above which Sun, Moon, and Stars revolve; and that, as water is LEVEL and not convex, the world is a vast irregular plane and not a globe.

On or about the 21st March and 21st September the Sun travels the circle, called the "Equator," and is thus at right angles to the earth and sea at all points on that circle. This fact constitutes the standard measuring rod for all observations for finding the ship's position at sea. If, for example, we are in Latitude 20 deg., N. or S., the altitude of the Sun's centre at noon (the time when the Sun reaches its maximum altitude at our position), on, say, 21st March, will be 70 deg.; if in 70 deg., N. or S., the altitude will be 20 deg.

From March 21st, the Sun travels in a northerly direction, until it attains its greatest Northern Declination, about the 21st June; so that on any day except that on which the Sun is on the Equator, the declination has to be taken account of, as in the working out of the following:—

On May 1st, Sun's declination was 22 deg. 8 min. N.; altitude, Sun's centre, 25 deg. 14 min., bearing N.; required the latitude.

True alt. Sun's centre	25°	14'	N
	90°		
Declination,	64°	46'	S
	22°	8'	N
Latitude,	42°	38'	S

or,

Suns declination,	-	-	-	22°	8'	N
Suns Altitude,	-	-	-	25°	14'	N
				47°	22'	N
				90°		
Latitude,	42°	38'	S			

In this case, had the observation been taken when the Sun was on the Equator, the Latitude would have been 64 deg. 46 min., but as the Sun had gone 22 deg. 8 min. further North, that amount must be deducted from the position the ship would have occupied had the Sun been on the Equator. *It will thus be seen that the right angle the Sun makes with the surface of the ocean when on the Equator is the basis of all navigation.*

Now, whoever heard of a right angle on a rotund surface? Try, if you will, to obtain that angle on a ball—the tiny globe I hold in my hand—and you will fail. Or, search the books of Euclid and Geometry, and your failure to get the angle will be equally certain. On a plane surface, such as the ocean, all is plain and simple; on the convex surface of a ball it is impossible.

Observing the angular distance of the Sun, or any heavenly body, is done in exactly the same way as one would measure the height of say, a church steeple, with a sextant.

In working out the position from the time the observation is taken, the factors of Index Error, Sun's correction, Semi-diameter, and Declination are plain enough; the only thing we require to notice here is what is erroneously styled "dip." When an observation has been taken, it is supposed that, as the surface of the sea is *assumed* to be convex, an allowance must be made for the "dip" of the Sun behind the "apparent" horizon of the observer; being the difference between the "apparent" and the "true" horizons. This, however, is completely upset by the fact that the height above water level (mark the term "level") of the observer's eye regulates this so-called "dip." *If his eye were at water-level, there would be nothing to deduct for dip, but as he stands on the ship's deck, he has to deduct a certain amount for the number of feet his eye is above sea level. Therefore "dip" is simply a misnomer for the factor, it is the height above water-level of the observer's eye; for it follows that the higher the eye of the observer, the greater will the reading on his instrument be, and thus the "height of eye" must be deducted to give the correct reading. But, if the surface of the ocean were convex, an allowance would have to be made with the eye at water-level. This fact kills the "dip" theory, and allows it no hope of a resurrection.*

(To be continued.)

## THE PENDULUM TRICK EXPOSED.

## "FOUCAULT'S PENDULUM."

"To make apparent the rotation of the Earth."

"If the pendulum be started along the Zero line, in a short time it will appear to depart from it and take an oblique course. This arises from its remaining true to its first direction, while the table and surrounding objects have moved with the Earth. The experiment was first performed by Foucault at The Pantheon, Paris, in the year 1849."

In gilt letters so runs the above legend at the South Kensington Museum, to professedly explain the presumed use of the Arrangement under consideration; the Authorities, unfortunately, have omitted to give publicity to records of the failure of the Thing in non-demonstrating what *they say* it does, and in which it demonstrates *against* The Globular Theory.

In the early part of the year 1889, I, in company with my respected friend, the late John Hampden, paid a visit to the Museum for the special purpose of closely examining this mechanical arrangement, known as Foucault's Pendulum, which is placed there presumably (by a beneficent Government at the instigation of the Scientific (?) Professors, and at our expense) to enlighten (?) the British Public generally, and the Rising Generation in particular, in that branch of Modern Theoretical Science (so-called) which professes to teach the supposed flashing motions of The World (assumed a globe) through what is very glibly called "Space."

Exercising our right as taxpayers, we requested the obliging attendant to start the motionless Pendulum into motion, reminding him we wished to see it performed in the correct manner, viz: severing by ignition, the thread which holds the bulb of the pendulum; thus releasing it to proceed on its momentous course without bias (you'll kindly bear in mind, the World is supposed to be flashing on and around in various ways throughout these unbiassed operations); this done, John Hampden and myself took up our positions, and after patiently watching the Thing for the better part of an hour, we were again compelled to verify what has been repeatedly acknowledged, with regard to this so-called proof of The World's movements, that is, its *absolute worthlessness* for the purpose intended; in fact, to put it mildly, it is nothing but a downright piece of gammon to say it proves anything as stated. We then closely questioned the attendant on several points, regarding the Thing, until the poor man had to candidly own his ignorance on the crucial points, and respectfully advised

us to refer our (Zetetic) questions to Professor Somebody (with a lot of letters at the end of his name), who would, he thought, explain and answer any questions to our satisfaction; but, having had *some Professional assistance (?)* before on this and kindred matters, we knew better than waste valuable time, money and breath perhaps, on such an errand. During the cross-examination, an interested audience had gathered round (us and the Thing), to whom John Hampden explained in a few pithy sentences, the gross absurdity of the whole affair, leaving them wondering, and, we hoped, thinking too. Several times since, visits have been made to the Thing with the same abortive results, and I've since wondered how much longer the Authorities intend to hoax the Public, or how long the Public will allow themselves to be humbugged by such a down-right piece of brazen-gammon. The absurdity of the affair is made more apparent by the position in which the Thing is placed—viz., where it is acted upon by strong cross currents of air, quite sufficient to upset the exact working of a delicately suspended oscillating body. Whether or no, this is used as a subterfuge to explain the erratic action of the Thing, I cannot say, but there it is.

Let any sensible person imagine or conceive how a delicately suspended pendulum would be bound to act were it in a building which stood (?) on a globe whirling, twirling, and flashing (through somewhere or something, called Space), with numerous motions approximating from 14 to 19 miles *per second*, irrespective of conflicting currents of air, conducted up the well-hole of a staircase; and then ask himself the question, whether the British public, in tolerating such a fraud, does not still deserve to carry Thomas Carlyle's censure of "mostly fools," by continuing to uphold a Thing which, being used as it is, can only deceive and gull them; yet on it goes, much to the wonder and flabbergastering of parties of country cousins, school-fuls of children, and thousands of adults, who very often pride themselves as being intelligent and reasonable Human beings.

The so-called Pendulum Proof of The World's assumed rotation was obliged to be renounced years ago as worthless, by those who were in the best possible position to judge it, as these few of numerous extracts plainly show.

"The French, English, and European continental journals have given publicity to an experiment made in Paris with a pendulum; which experiment is said to have had the same results when made elsewhere. To the facts set forth no contradiction has been given, and it is, therefore, to be hoped that they are true. The correctness of the *inferences* drawn, however, from the facts is another matter. The first position

of these theorists is, that in a complete vacuum, beyond the sphere of the earth's atmosphere, a pendulum will continue to oscillate in one and the same original plane. On that *supposition* their *whole theory is founded*. In making this supposition the fact is overlooked that there is *no vibratory motion* unless through atmospheric resistance, or by force opposing impulse. Perpetual progress in rectilinear motion may be *imagined*, as in the corpuscular theory of light; circular motion may be also found in the planetary systems; and parabolic and hyperbolic motions in those of comets; but vibration is artificial and of limited duration. No body in nature returns the same road it went, unless artificially constrained to do so. The supposition of a permanent vibratory motion, such as is presumed in the theory advanced is *unfounded in fact* and absurd in idea; and the whole affair of this proclaimed discovery falls to the ground." "T."

"Liverpool Mercury," May 23rd.

Again, in the same month, appears the following:—

A scientific gentleman in Dundee recently tried the pendulum experiment, and concludes by saying, "That the pendulum is capable of showing the earth's motion, I regard as a gross delusion. . . ."

Again, another asserts: "He and others had made many pendulum experiments, and had discovered that the plane of vibration had nothing whatever to do with the meridian longitude, nor with the earth's motion. . . ."

In many instances experiments have however not even shown a change in the plane of oscillation of the pendulum; in others the alteration has been in the wrong direction; in fact, in numerous instances, the rates and directions have been altogether opposite to that which the theory indicated; a notable illustration of this was given publicly by the Rev. H. H. Jones, F.R.A.S., in 1851, at the Library Hall of the Manchester Athenæum, where the diurnal rotation of the earth was to be attempted to be demonstrated by a delicately adjusted Pendulum; after giving, at length, a minute description of the arrangements and apparatus, we come to the admission, that the pendulum, on being released, travelled over a measured space in *seven minutes*, whereas, according to the theory, it ought to have taken fifteen minutes, or more, to accomplish the distance; and remember, this great difference was made without any allowance being made for the resistance of the air, which would be considerable. Anyone can verify this account by referring to the "Manchester Examiner Supplement" of May 24th, 1851.

By referring to "The Figure of The Earth," by J. Von Gumpach, 2nd edit., 1862, on pp. 229 to 244, results will be seen of Sixty-seven

experiments with the Pendulum, made in every latitude North, and Twenty-nine South of the Equator, by Captains Foster and Kayter, and General Sabine, all of which are admitted to be absolutely worthless for proving anything regarding the *assumed* motion of The World through space.

If such testimony is not enough to make Pendulum-proof worshippers *think*, they must either be as bigoted as it is possible to conceive, or as thick in the cranium as their globe.

When the original experiment with the Pendulum was first brought to the notice of the Scientific world (to quote "Parallax"), "The pride and exultation of Astronomers became almost unbounded, and heedless of restraint. But, after a time, their clamorous triumph over all who had doubted the truthfulness of the Newtonian system suddenly ceased. The blinding meteor had fallen into the sea and become extinguished. A deceptive theory had allured them into a morass of false and illogical reasoning. They had long before *assumed* that the earth had diurnal rotation; and now, instead of honestly admitting the simple fact that the Pendulum, under certain conditions, did not maintain its original plane of vibration, they again, contrary to every principle of justice and reason, recklessly dared to *assume* that it was not the pendulum at all, but the earth underneath it which "parted company and moved away to the West." Like drowning men they catch not only at straws, but even shadows in their frantic attempts to bolster up their darling gigantic Globular Fraud.

"The motion of the earth was *first assumed* to exist; and when there still was no visible sign of motion, they again *assumed* that their *first assumption* was right, and affirmed that that which really and visibly moved *could not* be moving, because that which could not be seen, or proved to move, *must* be in motion according to their theory, or first assumption! The Pendulum, as though a living creature, conscious of unbearable defamation, subsequently became so irregular in its behaviour that the astronomers did, and were glad to disown it as an ally or friend of their calumnious philosophy. They struggled fiercely to retain its peculiarities as a proof of their groundless assumptions, but the battle was short and decisive. The Pendulum ignored the connection; and the Scientific world was compelled to submit to a divorce, and to acknowledge defeat. Their reasoning had been *dexterous*, but *false* and *devious*. A greater violation of the laws of investigation was never perpetrated. . . ."

Yet after all this ignominious collapse and acknowledged defeat, the present Authorities have the ignorance, or impudence, to keep the *Thing* dangling-on at the South Kensington Museum, and to advertise a most *deliberate false*

hood in gilt letters; not only are They monopolising valuable Public space, but, what is far worse, are in effect, insidiously poisoning the mind of the Public at large, and posing at the same time as Scientists of the first grade of this much belauded, highly-enlightened (?) age. Whenever anyone quotes the "Pendulum Trick" as *proof* of the Rotation of the World, you can safely label the proposer as being quite ignorant of the matter, or of wilful misrepresentation amounting to *Falsehood!*

#### ICONOCLAST.

#### "OBJECT LESSONS," WHAT THEY TEACH.

WHAT a pleasant school it was at Lincoln. Miss Newton was such a kind teacher, and the children all loved her for her patience. She could always discern between real difficulties and idleness, and was so kind in explaining a hard lesson.

Grace Kepler was sitting one day, with her book before her, with a very puzzled face. Miss Newton called her up. "What is the matter, Grace?" she asked kindly. "Oh, please, Miss Newton, it is so difficult. My book says the sun does NOT move, and I *have SEEN* it move! Yes, I'm certain sure I've *seen it move*. Why the other night I saw it go right down until it was quite gone out of sight." And Grace's face looked grave and troubled.

Miss Newton put her arm round the child, and explained that *the movement we see* is the earth's movement, not the sun's. At this Grace's eyes opened still wider, "Because," she said, "I never *FELT the earth move!*"

So Miss Newton thought it was time for a *practical lesson* in Astronomy. She called up the whole class, and with the aid of a globe and an orange, she made the matter clear to Grace and the others.

The above I trust will show Mr Beaston and others HOW unsuspecting children's reasoning faculties are stultified and their minds literally stunted by being crammed from books, or, the pre-crammed minds of so-called teachers.

School teachers, in most cases unconsciously, teach children as truth that which is absolutely false, consequently when grown up they deny the evidence of their senses.

Virchow once said, "WE OUGHT NOT TO TEACH TO LITTLE CHILDREN, AS A *known FACT*, THAT WHICH IS *not A known FACT*." We believe he spoke *the Truth*.

LEO CASTLE.

# -THE- EARTH-NOT A GLOBE-REVIEW.

SIX MILES.



Vol IV "Parallax" proving the Surface of Water to be Horizontal.

## SOMETHING THAT ENGLAND DARES NOT ATTEMPT!

WITH all her big guns, with all her armies and navies, all her costly school boards, all her public and private educational establishments, all her literary and scientific professorships, with all her journalistic pre-eminence and theological learning, with all her university extension schemes, she dare not openly discuss in the presence of any one honest and intelligent opponent, the basis upon which the globular or Newtonian theory is founded, or show that it is agreeable to Scripture, to reason, to fact, or to sound philosophy!

The idea of living on a globular and revolving World, turning upside down every twenty-four hours, spinning through space at the rate of over one thousand miles a minute, and never knowing whether we are standing on our heads or our heels, is a disgrace not only to our pretended civilisation, but to humanity itself, and debases us far below the brute instinct of the ox and the ass! Ought not, then, every schoolmaster in the kingdom to be regarded as an enemy to all knowledge for enforcing upon our sons and daughters such execrable superstitions, a thousand times more God-dishonouring and fraudulent than anything fortune tellers ever were or could be guilty of?

The lesson we would especially urge, from a consideration of the above remarks, is the utter depth of degradation and abasement into which individuals and nations will be suffered to fall when they depart one hair's breadth from the spirit and teaching of inspired truth; and that the beasts of the fields are living far nearer to the mind and will of their Creator than men who impiously attempt to improve upon what divine infallibility has most clearly revealed.

The abandonment of its false, spurious science, will, undoubtedly, cost England a much greater degree of chagrin and humiliation than having to surrender the keys of her capital to a foreign foe. But this indignity she has yet to submit to, in common with every other so-called civilised nation in the world.

Those who will continue to wipe out this national reproach, or, at all events, resent the imposition of these fictions on their children, are requested to aid in supporting this publication which is devoted to a consideration of these essential and too long neglected subjects.

## ZETETIC QUESTIONS AND ANSWERS.

BY LADY BLOUNT, F.B.P., ETC.

*To those who assert that "the Bible was not given to teach science," we earnestly commend the following Questions and Answers to their prayerful consideration, and be it remembered that the Scripture quotations are not the words of men, but the Holy Spirit.* ED.

Was there a time when the world was not?

Yes, for we read: "Before the mountains were settled, before the hills was I brought forth; while as yet He had not made the Earth, nor the fields" (open plains, margin.) Prov. viii. 25.

How did God create the world?

"The Lord by wisdom founded the earth; by understanding hath He established the heavens." Prov. iii. 19.

"He spake, and it was done; He commanded, and it stood fast." Ps. xxxiii. 9.

What did God create on the first day?

"Light, which God called day," and He divided the light from the darkness, which he called night. Hence light was made *before* the Sun.

What did God make on the second day?

The firmament, or a strong and solid expanse overhead, made to divide the waters which were above the firmament, from the waters which were below the firmament.

What proof is there that the "firmament" has this meaning, and Job describes it as sky, which is "strong and as a molten looking glass." Job xxxvii. 18.

Its purpose also shows this as it has to support the waters which are "above" the firmament.

At the time of the Flood some of these waters came down upon the earth for the windows (margin lettering, bags) of heaven were opened.

What did God make on the third day?

He gathered the waters together unto one place, which He called "seas," and made dry land appear, which He called "earth," and the grass, the herbs, and the trees all yielding fruit after their kind.

Thus the land only is called "Earth" in the Bible.

Did God create the Earth as a moveable or rotating Planet?

No; He laid its "foundations" that IT should not be moved for ever, or until the ages.

"The world also is established that it cannot be moved." Ps. xciii. 1.

He commanded and IT STOOD FAST. Ps. xxxiii 9.

What experiments have been tried to prove the Earth is stationary?

Cannon balls have been fired perpendicularly and they have fallen again into and near the cannon; thus practically confirming the evidence of our senses that the earth does not rotate at all.

To what may we liken the Earth?

We may liken it to a vast flat and floating vessel fastened by its foundations as with an anchor.

"For He hath founded it upon the sea, and established it upon the floods." Ps. xxiv. 2.

What did God make on the fourth day?

The Sun and the Moon and the Stars to divide the day from the night, and to be for signs and for seasons, and for days and years."

These are smaller "lights" only and are all intended for this world.

God said: "Let there be lights in the firmament of the heavens to give light upon the Earth: and it was so." Gen. i. 14-15.

Have the Stars ever been used by man?

Yes, prophets and wise men of old understood them and were guided by them, at the birth of Jesus.

We are also told that the stars shall fall from heaven and the Sun be turned into darkness before the great day of judgment. Joel ii. 10-31.

Of what shape is the Earth and Sea taken together?

On the surface it appears to be round—not spherical—for we read: "It is He that sitteth upon the circle of the Earth, and the inhabitants thereof are as grasshoppers; that stretched out the heavens as a curtain, and spreadeth them out as a tent to 'dwell in.'" Isa. xl. 22.

Again, "He that created the heavens and stretched them out, He spread forth the Earth." Isa. xlii. 5.

(Then it must be a plane and not "this terrestrial ball" as Christians sing to God on Sundays.—Ed.)

In how many days were all things created?

In six literal days of 24 hours each. For in six days the Lord made heaven and earth, the sea, and ALL that are in them and rested the *Seventh day*, wherefore the Lord blessed the Seventh day. Ex. xx. 11.

The Sabbath was a literal day of 24 hours, so also must the other days have been literal days of 24 hours each.

What power holds substances together?

The power of God! Heb. i. 3; Jer. x. 12, and li. 15.

The Scientists call it "cohesion," but this is only a sort of conjuring word, for *what* is "co-hesion?"



If this power which holds substances together were to cease to operate, what would be the result?

This is beyond the comprehension of man, but according to human judgment all substances would be decomposed into elements of which they are composed, the earth would crumble to pieces, water would disappear into gases, and likewise all created things would perish for "In God we live, and move, and have our being."

Did Newton profess to have discovered the nature of this wonderful "power of God" which holds substances together?

Yes; and he termed it the "law of Gravitation," but this phrase does not give any information, for if we ask, "What is Gravitation?" we are only told that it is some power which causes all bodies to attract one another! Besides it is not true that all bodies do attract each other! Iron does *not* attract wood, stubble does *not* attract gold.

How and when did Newton introduce his teaching?

Newton was born A.D. 1642. He introduced his teaching by way of hypotheses.

*The law of gravitation lay smothered,  
And was discovered—  
Not through the Church,  
Nor through the chapel,  
But an apple!  
So we're taught in the schools by the seers.  
The earth, they say,  
Was formed by this notion,  
And put in motion.  
By crystallization and wild revolution.  
With some evolution—  
While gravity helped for millions of years.*

Is it possible for modern astronomers to prove that their description of the world corresponds with that given in the Bible?

No, and many of them openly assert that the Bible errs on this subject, and they set up Newton as a greater authority than Moses or Christ, as the following quotation proves:—

"We must protest against the admixture of so grave a suggestion as that of giving God the lie.

"Moses has given his crude ideas (!!) as to the age of the world, but modern philosophers and scientists have clearly an equal right to give their deductions and opinions, especially as they produce evidence in which department Moses was very much at a disadvantage." "The Muses," Dec., '95.

But it may be remarked that they who deny Moses also deny Jesus Christ, according to His own authority, and we cannot consistently accept N.T. teaching while denying or rejecting the Old Testament

teaching, for holy men of old spake as they were moved (lit. guided) by the Holy Spirit, and Jesus Christ spake and acted by the same Holy Spirit.

Is Modern Science consistent with the dictates of common sense?

No; they are like oil and vinegar, they will not mingle, for common sense gains by experience and soon uproots shallow and speculative fancies.

*It chanced one day two notables  
Well versed in mystic lore,  
"Experience" and "Science"—  
Both rested on Time's shore.*

*The noble Earl, "Lord Science" named  
Deigned courtesy to show,  
And thus addressed "Experience,"  
"All that you see—I know."*

*"The Knight "Experience" replied,  
"My Lord I'll own you've read,  
And studied hard from youth to age,  
From birth to hoary head.*

*Yet while you're prematurely old,  
There's this twixt you and me,  
I now can boast in youth and health,  
More than you "know" I see.*

Is it reasonable for a man to believe a "science" which he does not understand?

No; it is not only unreasonable, but it is impossible, if the source of teaching is from his fellow-man.

But it is otherwise with God's dealings that man can neither solve nor determine the eternal purposes of God further than the Almighty has revealed in the Holy Scripture as is generally admitted.

Thus all men can study nature or natural phenomena as it contains nothing of a private nature, the young are taught both the Bible and science.

The Globular theory contradicts the Bible and common sense. A good proportion of children (even of tender years) would discover this discrepancy, were they not befogged with outlandish and self-stultifying terms, figures, and buffoonery, invented by shrewd speculators and long-headed scientists, false to the Word of God and with calm demeanor quote their strange exploits. That the earth is a stationary plane, was the belief of mankind for over 5,500 years.

The most ancient writings in the universe describes the Earth as a plane, surrounded by a gigantic ocean as a circumference.

Thus it is as possible to circumnavigate the Earth as it is to sail around an island.

Do all the Nations now accept the Globular theory?

No; India and China do not generally accept it, and thousands of intelligent Europeans utterly reject it.

What causes a stone when thrown in the air to fall to the ground?

Its own weight. There are accountable reasons, or laws, why flies on the ceiling, feathers, light substances, birds, balloons, etc., in the air do not fall as they ought to were the "law of Gravitation" actually in operation.

Referring to the first chapter of Heb., verse 3, it would be well to note the literal rendering of verse 2 as it throws a light respecting the word "worlds," which is found in no other passage, but which should be translated (see verse 2): "In the last of these days spoke unto us, by a Son, whom He hath appointed heir of all things, on account of whom also He constituted 'the ages.'" (Emphatic Diaglot.)

How is it that when sailing due East or West we come round to the same place?

This would be an impossibility on a globe, if (as Globulists believe) due East and West were *straight lines*.

But we can sail around the whole earth in the same way that we can sail around an island.

The mariner's compass points to the north centre, and as a vessel sails around a great circle, the instrument is ever directed to the same point while it also lies horizontal—which it could not do on a Globe—hence, in the behaviour of the mariner's compass we have a good proof of the plane teaching.

Does not the Sun's asserted rising E.S.E. and setting W.S.W. in New Zealand during their summer months disprove the plane teaching?

No; for the motion of the heavenly bodies has nothing to do with the surface shape of the Earth, no more than a chandelier has to do with the shape of a room, or a floor.

Is not the Plane teaching principally upheld through a persistent belief in the literal English in the Bible texts?

Neither the holy men of old, nor the Apostles and Prophets, were influenced by the literal English of our translation, yet they, in the power of Inspiration, taught that the earth was a motionless Plane, and the ancient languages agree therewith.

Is it not logical to proffer argumentatively in upholding the Globular theory that as many of the Bible expressions are symbolic, perhaps those favouring the Plane Earth teaching may also be symbolic?

As all Scripture statements are not symbolic, it ought, in common honesty, to be shown that those Scriptures, teaching that the earth is a motionless Plane, are only figurative.

Besides we know the earth is a plane from the fact that the surface of all water at rest is level, horizontal, flat.

Thus we rest not our belief in this on the Scriptures *alone*, though these of themselves *are* sufficient for a true Christian.

Do not the theories of Modern Astronomy discredit the account of creation?

Yes; they contradict the teaching of Moses (which Christ endorsed) in saying that the Stars are "worlds."

The Bible never speaks of but one world, or cosmos; and it calls the stars mere "lights," and the Sun a "greater light," and the Moon another and independent light. Now it is absurd to make a "light," or a lamp, one million four hundred and nine thousand and four hundred times the size of the place to be lighted!

Astronomy also contradicts the Word of God in calling the Moon an opaque dark body in itself, for the Bible clearly states that God made *two* "great lights," the Sun and Moon, while Astronomy affirms that the Moon is only a reflector of the Sun's light!

Besides, moonshine is very different in its nature to sunshine, and the Moon has been seen shining with a dull red glow even when totally eclipsed.

How should we look upon human wisdom when it conflicts with Divine?

With distrust; for theoretical "Science" is merely speculation.

The Creator is surely wiser than the Creature; and "the wisdom of this world is foolishness with God." 1 Cor. iii. 19.

What then should we do?

Reverently study His Works, and His Word, so that we may gain wisdom and learn to trust Him better, and obtain that Eternal Life which He has promised through the Messiah to all them that love Him. Read Ps. iii.

Would it not be a hard task for Geologists, Globularists, and Commentators to reconcile their theories with Gen. i.; Job xxviii., etc.; Pss. xxiv., cxxxvi., civ., and Pet. iii. 5, ii.?

There are few Scientists who dare attempt any reconciliation. For the most part they scornfully ignore Genesis.

Commentators are mostly silent, and when driven into a corner they uphold Newton, otherwise it is a notable fact that they pass over all passages relating to true cosmogony without comment.

Why attach so much importance to this question of the Earth's shape?

Because it proves the Bible to be true; because the endless life which God promises is to be spent with Christ (when he returns) upon the renewed earth. Matt. v. 5; vi. 10; and Rev. v. 10.

Is the fact that the masts of a ship approaching the shore are seen before the hull any proof that the Earth is a Globe?

None whatever; because this is explainable by the laws of perspective, and after the ship has wholly disappeared from the vision of

the naked eye, it can in calm weather often be restored to view by a good telescope.

Where is the end of light and darkness?

At the great Southern circumference—where the “waters are compassed with bounds, until the day and night come to an end.” See Job xxvi. 10.

Of what do these boundaries of the Southern Seas consist?

They are solid walls of ice—even great cliffs which the Almighty set as “bars and doors”—and said to the sea “hitherto shall thou come, but no further, and here shall thy proud waves be stayed.” Job xxxviii. 11; and here Job also says, “The face of the deep is frozen.” Verse 30.

What is the general form of the Universe according to the Holy Scriptures?

We are told in the Holy Writings, as also we verily know from observation, that the earth, or land, rests upon the waters of the great deep—

And the Heavens are spread out as a canopy above—

Job, in speaking of the mighty works of God, said: “Who shut up the sea with doors when it break forth, and when I made the clouds a garment thereof—and thick darkness a swaddling band for it.” Job. xxxviii. 9, 10.

Does the Sun’s light travel in straight lines?

No; it converges, and by the refrangibility of the whole bulk of its rays it circles the earth.

The cause of this disposition to refraction is attributable to the rays passing through media of different density in the atmosphere which is said to be greater in the South and less in the North.

How is the astral phenomena explained?

Some think it due to reflection, chiefly emanating from the central point or North centre; say rather that the stars were made by the Creator to go in their courses to lighten and influence different parts of the earth.

But it is quite possible to know the shape of the earth without understanding all about Star motions, some of which are very intricate. See Jud. v. 20, and Deut. iv. 19.

How is it that when there is a lunar eclipse the shadow is always round?

The so-called shadow is *not* always round. It was once noticed of a triangular shape. But a straight object will give a curved shadow upon a sphere, as you may see by holding a straight edge before an apple by gas-light.

But it has never been shown that the Earth could possibly cast a shadow on the moon. If the earth cut off the light from the moon,

the moon ought to be quite dark during the eclipse, but it is not dark, *its light* shines through the supposed shadow! “Parallax” thought that a semi-opaque but dark moon came between us and the luminous moon, and so caused the lunar eclipse.

Astronomers admit that there are dark bodies in the sky.

The moon’s “eclipse” may be caused by its getting into a mass of “thick darkness” which revolves around and over the earth in “opposition” to the sun.

This thick, dry, foggy atmosphere would obscure the moon’s rays, but does not obliterate them. Whatever explanation is accepted we cannot admit the idea of the earth’s shadow, because sun and moon have both been seen *above* the horizon during the eclipse of the moon, and we know from other sources that these bodies circle over a plane earth.

How is day and night caused if the world is not a Globe?

Day and night are caused by the revolution of the sun over and around the earth. The sun is neither high enough nor large enough to shine over all the earth, but only over about half of it at once, the atmosphere deflecting the sun’s rays from the earth when they fall very obliquely, so that darkness follows in those parts until the sun comes round again and nearer.

What proof is there that water is “horizontal?”

“Parallax” proved again and again that the surface water of the Bedford Canal *is absolutely level*.

How far off can ships be seen at sea?

From 10 to 20 miles, according to the height of the observers and the clearness of the atmosphere.

Lights have been seen further off than that. The flame of the Clare Island light can be seen in clear weather, a distance of 31 statute miles.

And the Barra Head lighthouse is visible at a distance of 38 miles.

(See “Admiralty List of Lights,” 1893.)

Is this consistent with the Globular theory?

No; as according to the Globular theory the “dip” would prevent such being seen.

Do the calculations which have been made by astronomers agree with the Globular theory?

They do not; for instance, it would be but half the distance round the earth 45 degrees south of the equator if the earth were a Globe.

Are appearances in favour of the Globular theory, or the Flat Earth teaching?

The latter, even as is acknowledged by astronomers themselves!

Ought we not to believe the evidence of our senses?

Yes; unless we have palpable proof to the contrary.

Is there any evidence in support of the supposed motion of the Earth?

Not the slightest. No practical proof of these terrible motions is ever offered by the astronomers.

Would there not be some sensible effects of the tremendous motions attributed to the Earth?

Certainly; if such motions existed. Smoke, vapour, clouds, etc., would undoubtedly rush to the rear, whereas they FLOAT in different directions; or rest quite still, proving there are no such motions.

Do Navigators use a model globe to navigate with?

No; they used to, but now their Charts are drawn out from Mercator's projection portraying the Ocean's surface as being *absolutely horizontal!*

Why has this change been made?

Because it is proved practically to be the best guide to steer by.

What is there beyond the Southern circumferential boundary?

Man has failed to penetrate beyond this boundary, as hitherto the Almighty has not permitted him to do so, therefore, it is unknown what is beyond!

---

## A VINDICATION OF THE DIVINE COSMOGONY.

By JOHN DOVE, M.A. (1757).

THAT Moses was acquainted with the most abstruse mysteries of Nature is a truth denied by none but upstart philosophers, who would revile him without having read or understood him.

The three first chapters of Genesis contain a revelation of what otherwise would never have been known, *i.e.*, the first principles or rudiments of knowledge, natural and divine. But for the information recorded in those chapters, the human race had never known science or anything concerning the facts of creation. For we were created; there is nothing innate in us or derived from prior existences; language itself was given, not acquired. The philosopher who pleads for any other cause than a divine creation, simply writes himself down a fool. It is useless for the genuine truth seeker to expect to derive information from those who will need write before they have read; or from the commentators who will give every sense of the text but the true one; or from the system-mongers who will cripple the whole Scripture to make it speak their sense; nor from the philosophers who believe they know better than the inspired historians, or argue that there is no certain standard of truth and that we were sent hither to grope in the dark or learn wisdom from our fellow worms. Moses affirms:—"In the be-

ginning God made the heavens and the earth;" the philosophers maintain the eternity of matter, make a god of it, and bow down to the idol they have set up, and would, like Nebuchadnezzar, put everyone in a furnace who refuses obedience to their decrees! To listen to their description of gravity, attraction, centrifugal and centripetal forces, it would carry the appearance of a romance. Did any man yet ever understand Sir Isaac Newton's philosophy; or will any man undertake to prove the truth of it? His warmest advocates have acknowledged "they had not all that evidence of its truth that they could desire;" because they have rejected the revelation of God, and have set up they know not what. They are incorrigible and will not be corrected. Therefore I quit them all and turn to the ecclesiastics, whose proper business it is to study and expound the Scriptures. But I have to tell them as well as the philosophers that in rejecting or doubting the book of Genesis, they stumble at the very threshold of their studies, and seldom or ever after recover themselves. If they understood or believed in Moses, they would possess more real knowledge than all their other learning can teach them.

It is or should be a matter granted, that God and His works must agree; therefore, he that fully understands any part of God's works of creation, as seen in the visible world, and can find in the account given of them in Moses, the Prophets or the Apostles any disagreement, has a right, as a rational creature to be a Deist; but if no such disagreement can be found, instead of a rational Deist, he must be a fool. And since it is a truth, that philosophy and divinity are closely connected, and that an error in the former cannot fail in producing an error in the latter; and since no system of philosophy, in any age, hitherto proposed to mankind, besides that of Moses, was ever pretended to agree with Scripture,—it is not very extraordinary that no philosopher who pretended to have any respect for the Scriptures, has ever attempted to understand and compare the philosophy of Moses with the real and demonstrable facts of nature? Can it be for want of ability, or that they wilfully prefer falsehood to truth, in the hope or belief that others would do the same? If what Moses wrote was not the literal truth, why have not his mistakes been honestly pointed out by our gentlemen of science? Moses has given us a rational process of the creation, which is more than any one else has done, and more may be said of him than any other philosopher that ever lived, *viz.*, that he has not made one mistake in the account he has given of nature; all the others have scarce delivered one truth concerning it! Truth and falsehood can never be made to agree; therefore, all the experiments that the modern philosopher can make, will never make their system agree with

truth or common sense ; but they all demonstrate the truth of the Mosaic account of Nature!

The revelation of God is plain, not delivered in mysterious language, as is the modern philosophy, and, when understood, corresponds with right reason. Is it not therefore strange that so many disagreements of it should still subsist? For I cannot find that men in general know any more about it, than about the laws and language of the world in the moon, if such a world there be.

In the two first chapters of Genesis, Moses has given a distinct and positive statement of the mechanical laws or operations by which nature rose into being by the hands of her omnipotent Creator, and by which her stupendous works are still carried on; for nature came not into being by chance or from any pre-existing condition; nor was any fact stated which is not open to the examination of every intelligent person, but which no man yet, has been able to overthrow or improve upon.

But what a condition are we in at present? Not one dignitary in Europe, that has learning or honesty enough to determine the truth of these divine records! Is it possible to conceive that both Protestants and Papists have agreed to let the people be under such delusions? An absolutely correct and literal translation of the Hebrew Scriptures would present to our view one uniform system of divine, moral, and philosophical truth, that would dispel error, as the morning dawn scatters the darkness of the night. So, then, as all that truth which the faith of a Christian has anything to do with, is contained in Scriptures of Moses, the Prophets, and Apostles, whatever agrees not with those Scriptures is to be rejected, whether it relates to divinity or philosophy. For if in them we have false accounts of the Works of God, no man in his senses will or ought to believe they contain a revelation of God. What! shall the God of truth not give us a true account of His own work? Shall the God of Nature deceive our senses? God forbid! For as we can know nothing of God but by His Works, nor of His Works, till they are apprehended by the senses He has given us, it is utterly inconceivable to suppose He should have endowed us with such senses as are only calculated to deceive us, or by giving a false account of the works of His own hand.

If, in the language this revelation was originally made, our opponents can find but one philosophical mistake, we will unreservedly yield up the whole for a cheat! The translators and the whole group of commentators are herein to blame; for they have all to a man been blinded by a false philosophy, and have resented every attempt to unshackle them; whereby they have been bewildered in uncertainty and error, and have left their readers in darkness and bondage ever since.

Are there any abettors of this heathen philosophy still amongst us? Yes, ten thousand; not only among the unlearned, but amongst our church dignitaries, our classical scholars and teachers! All on account of their ignorance and unbelief.

What will be the end of these things? I am no conjurer; but it is easy to determine what will be, from what has already taken place. It has been the fate of all kingdoms, nations, and people, from the beginning of time, upon their rejecting or perverting the revelation of God, to fall into anarchy, confusion, and infidelity. The Bible is, as it deserves to be, the great charter of our liberty. The loss of the Scriptures, or swerving from, or perverting the doctrines or history contained in them, has invariably been attended with discomfiture and ruin, and always will! And if their successors continue their resistance as they have done hitherto, it cannot fail to deluge the kingdom in atheism, destroying all social virtue, and turning it into a field of blood.

The system the philosophers would establish is founded on a quicksand, on a spirit of falsehood and lies; its stones unhewn—its mortar untempered—and its joints all open to the weather; when the winds blow, and the floods of opposition beat against it, it must tumble down and disappoint the faith of those dupes who trusted in its strength; because it is not founded nor erected according to, but against, the appointment and design of the Creator. The Scriptures contain the instructions of God, and show us the conditions, the ordinances, the laws which He hath ordained.

I have to repeat, again and again, that the Scriptures and nature are connected, as will appear to any impartial inquirer; those who will not take the pains to study them both, will remain fools, whether I say so or not. The not attending to this connexion has been the cause of that contempt with which the Scripture has been treated. Suppose we view the dial plate of a watch, we see the hand point to the hour, by a mechanism to us invisible; but we find a book wherein the inward structure of the watch or clock is described; we are at a loss whether to believe it or not; we know not whether it be true or false. How then shall we prove its truth? By taking the machine to pieces, and examining its works; if the book and the machine exactly agree, and the former be an accurate description of the latter, the inference must be, that either the maker of the machine wrote the book, or revealed the mechanism of it to him who did. This is absolutely the case between the Bible and nature. And if this examination were firmly, and candidly, and intelligently carried through, the numbers of our foolish philosophers would soon be diminished, and their specious system utterly

confounded. Moses and the Prophets never revealed the proper frame of a mouse-trap or the size of a bird cage, because they knew the star gazers would not heed such trifles, nor find any credit in constructing such things. But Moses and the Prophets did, by the inspiration and dictation of God, reveal to mankind the framework and mechanism of nature, which must have remained for ever inscrutable, but for such direct revelation; and which mode and plan of creation, when thus made known, appears true upon the highest demonstration the rational mind can demand!

Now for a coat of mail, to defend me from the tongues of scorpions, and the quills of porcupines,—a venomous serpentine brood, who besmear and befoul every divine and scriptural truth that runs counter to their almighty decrees. Let any man read those mystical and philosophical expostulations between God and Job; or let him read over both Testaments, and he shall find, if he reads attentively, that Scripture, all the way, makes use of nature, and hath revealed such mysteries as are not to be found in all the philosophers; so that I fear not to say that nature is so much the business of Scripture, that the spirit of God, in those sacred oracles, seems not only to dwell on the restitution of man in particular, but even the redemption of nature in general, and is as jealous of the right understanding of the one as of the other.

To speak then of God, without nature, is more than we can do, for he is not known in this way; and to speak of nature without God, is more than we may do; for we should be robbing God of His glory, and attribute those effects to nature, which belong only to God and to His spirit which works in nature. No man can venture to complain if we use Scripture to prove philosophy, and philosophy to prove divinity; because there is no divinity without nature, nor any true philosophy without God. It is a union insisted on by God, however objected to by man.

If men would but take Mr Locke's advice, and have the modesty to settle the limits of their understandings and determine what objects lay beyond, and what within their reach, they would not venture so often at things too high for them; or if they had the humility to consult Moses, he would prevent much fruitless labour and correct much inexcusable ignorance.

Real Christian philosophy is a pure and ennobling study, exalting the mind, and lifting it above every sordid pursuit, above everything that is low, little, or mean.

## THE VANISHING SHIP.

By "SEARCH TRUTH."

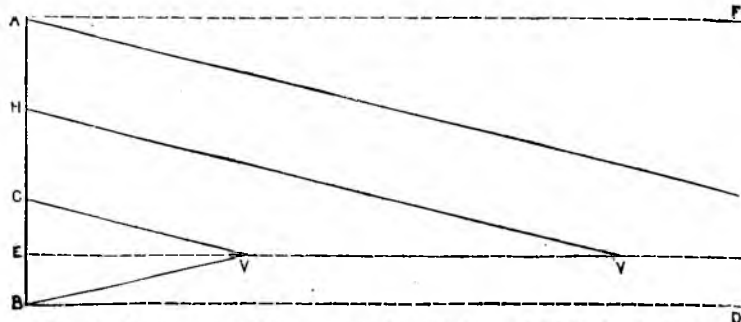
*Proofs (so-called) of the World's Rotundity, examined in the Light of Facts and Common Sense.*

PROOF I.—"If on a clear day we take our stand on a hill above a seaport while ships are leaving, we shall see that the ship does not become dimmer and dimmer, and is so lost at last to our view, but that we first lose sight of the hull, then of the lower half of the masts, and last of all of the top masts. In the same way, if we catch upon the horizon the first sign of a ship, we shall find it to be the top masts and top sails; then we shall next see the masts, the whole masts, part of the hull, and, last of all, the entire hull. In both cases it is as if the one ship were going down, and the other were coming up, a hill. This is one proof that the earth is round," *i.e.*, a globe. The above is copied from "A Senior Geography," by John Markwell, M.A., corrected down to 1882, and used by the London University.

PROOF EXAMINED.—If a good telescope be used when the hull of a vessel has disappeared very frequently the whole of the vessel will be restored to sight, specially in calm weather. How then can the hull of a vessel have gone down behind a "hill of water"? One must either believe that the telescope enabled the observer to see through a "hill of water," or else that there is no "hill of water" at all. The writer has seen the whole of a vessel through a telescope when, with the unaided eye, only the top of a mast could be seen. The vanishing hull trick is thus exposed as a fallacy, for it is certain that, if the ship had gone down behind a hill of water, no telescope could restore it to sight again. Often, when at the seaside, the hull of a vessel has disappeared to one person, but to another, of longer sight, it can be seen quite plainly. This proves it is partly a question of optics, for if once a vessel had gone behind a real hill of water, no difference of sight could possibly restore it to sight again. The Laws of Perspective alone are quite sufficient to account for the way ships disappear at sea, and it is strange that in almost all geography books these laws are ignored, as the following sentence clearly shows: "The ship does not become dimmer and dimmer." This is untrue, and is supporting a THEORY at the expense of FACTS. Let the reader watch for himself, and he will find that a receding vessel appears to become both smaller and more indistinct, until first the hull vanishes from sight and afterwards the masts, which gradually appear to grow less as the distance increases. The hull vanishes first partly because it is in and upon the water which



forms a dark background to the observer. The following diagram will illustrate the Law of Perspective, and show that it is quite in accordance with those laws for the hull to disappear first upon a plane surface.



Let A C represent the mast 20 feet high, and C B the hull 10 feet high; E the line of sight 5 feet above the surface of the water B D. The horizon will be formed at V, where the sea appears to meet the line of sight E V. The hull C B will appear to vanish gradually and equally until it is lost at V, because its higher and lower parts are equidistant from the line of sight E V; but the mast which rises 20 feet higher will not vanish at the same time, but will do so at a greater distance on the line E V. Thus, besides being against a clearer background, it will be evident that in such a position the hull must disappear first, and the mast afterward, by the laws of perspective alone. Because a hull would disappear if it actually went behind a "hill" it is concluded that the world is a globe; but if the earth were a globe a ship's hull could *never* be restored to sight. As this can happen on a flat surface, it can only be regarded that the earth and sea form a vast plane. It can, however, be demonstrated and practically proved in other ways that the sea is a vast extended plane, and that the world is *not* a globe.

### ZETETIC NOTIFICATIONS.

Please to ask for "The Earth—not a Globe—Review," at all Newsagents, Reading Rooms, and Railway Bookstalls. To be had direct from the Hon. Sec., post free, to any address in the postal union for 1s per year, in advance.

All monies for the Society must be paid direct to the Hon. Secretary, John Williams. Post Office Orders to be made payable at Nottingham.

THE RECEIPT OF A COPY OF THIS JOURNAL IS AN INVITATION TO SUBSCRIBE TO IT.

Will friends please notice that if this space ( ) contains a BLUE PENCIL CROSS, it is an indication that YOUR SUBSCRIPTION IS DUE. A RED PENCIL CROSS indicates that your subscription *will be due before* the next issue.

Will friends in ordering books please notice that only those which are quoted on the cover of the *last* issued Journal are those in stock.

As our object is to make this Journal a text book, we must request that friends quoting extracts of any kind, will please to quote their *source*. Unforeseen circumstances has caused the delay of this issue. Will friends kindly make a note of our change of address.

## REYNOLDS AGAIN!

*N.B.—All the following letters have been refused insertion by the Editor of Reynolds's Newspaper, therefore we print them ourselves.*

[TO THE EDITOR OF "REYNOLDS'S NEWSPAPER.]"

SIR,—I beg leave again to write you a few lines concerning a problem which, outside of religion and politics, stands foremost in the ranks of discussion—viz., the true shape of the earth. "Reynold's Newspaper" has the character wherever it is known, now and in past years, of being a *radical* paper; and, as such, it seems appropriate that so large a matter as the one in question should not receive a mere raking of the soil that surrounds it, but a vigorous and determined handling by an editor like yourself—one who will give the people their rights so far as pen and press can bestow them. Candidly, from the close experience of a third of a century, nothing has been wanting to bring the Zetetic philosophy into the prominence it deserves, but an uncompromising love of truth on the part of some well-known editor of a people's paper. Small unimportant papers in America, England, and elsewhere, are flooring all their opponents in a desultory fashion, and it only remains for one vigorous medium to raise a storm about the ears of our Scientists that must eventually and before long enable the public—the people—to discern the fact that truth admits of no prevarication, no supposition, no hypothesis, no theory, no speculation, of which every page of modern astronomy consists, but of a God-given certainty in which there can be no error. Thanking you for speaking out in your issue of the 14th ultimo, I sincerely hope that you may be the bold one who will withstand a little obloquy at the outset so that a glorious harvest may be reaped in the not very distant future.

For truth alone, yours,

WM. CARPENTER.

1316 N. Central Ave.,  
Baltimore, Maryland, U.S.A.,  
May 19th, 1895.

We have received *The Earth (not a Globe) Review*, in which a small band of zealots have the courage to maintain that the earth is flat without, so far as we have observed, explaining how a flat world can flounder through space; and as they deny gravitation, why the people on the under side don't fall off,—*"Reynold's Newspaper,"* May 10th, 1896.

SIR,—In your issue of the 10th I notice in the remarks on "The Earth—not a Globe—Review" some very strong *assumptions*—viz., the (assumed) floundering of the World through (assumed) space; the assumption of Universal *Gravitation* (not gravity), and consequently, the (assumed) impossible position of all things Terrestrial hanging upside-down on the underneath of an assumed Whirling Globe; don't you think it is about time that some of these (so-called Scientific) assumptions should either be proved or else thrown on the literary rubbish-heap? Why not write the secretary of the U.Z.S. for information before executing more intellectual floundering which only obfuscates the understanding of many of your readers, if not your own? for there is no "people on the under side" of this "flat world," therefore, they cannot "fall off!"

H. D'ARCHY ADAM.

P.S.—I enclose a £1000 challenge for a proof of earth curvature.

There are always enough faddists in this country to afford an unending source of amusement. Have we not the Theosophists and the Zetetic Society? The latter body claim to have discovered that the earth is a motionless and circular plane over which the sun and moon and stars revolve at moderate distances above it. It would be unnecessary to take notice of this preposterous theory except to lament that any person of intelligence should waste his time upon so gross an absurdity. The capability of the members of this Society for scientific demonstration may be guessed when I say that they take their science from the Bible. Now the Old Testament is full of the most elementary and glaring scientific inaccuracies. Modern science has proved over and over again that the writers of the Old Testament knew nothing about the physical condition of the earth, and certainly nothing of heaven, which, indeed, is not mentioned.—"Reynolds's Newspaper," May 17th, 1896.

SIR,—I fear you are not acquainted with that body of thinkers who, in your issue of May 17th, are criticised by you in such an off-handed manner. What is their crime, that they are with editorial vengeance cursed before your readers? Do you think Modern Astronomy will be advanced, or its glaring inconsistencies and falsehoods covered by your spleenish comparison of them to Theosophists? Mrs Besant in her lecture at St. George's Hall, Sept. 11th, 1891, said, "You must believe on hearsay, or personal investigation; the majority believe on hearsay alone." ("Daily Chronicle," Sept. 12th, 1891.) As a personal investigator, may I ask, which of the two classes *you* belong to? If you belong to the personal investigators, why not open your columns to us (for a short time) who are investigators of Nature, and let the people hear fairly what *we* have to say about this "Motionless Circular Plane," then you could invite an *able Scientist* to defend Modern Astronomy, and, my word for it, sir, we will soon show who has "wasted their time on a gross absurdity," and who it is that holds a "preposterous theory."

Small wonder that "the greatest lights of society, both at home and abroad, are Theosophists—viz., Professor Crookes, editor of the "Chemical Review;" Professor Alfred Russell Wallace, F.R.S., and many others too numerous to mention. Even Mr Gladstone was so far satisfied with many of their "ingenious schemes" that he said, "I hold the attitude of a student who has no reason to doubt your pretensions."—"Theosophy: The New Religion," p. 12. Now, sir, these lights (according to your statements) are "Faddists!!" May I ask you to insert this letter in your next issue, and so let your readers see that "faddists" are those who "believe on hearsay," that they exist on a Dutch-cheese-shaped Wobbling-Globe, with the consolation that when they "depart this life," as "there is neither *up* nor *down* in space" they cannot go *up* to heaven *above*, and as there is "no *up* on the globe," they of necessity, will have to go *down* to—well—to—O dear me, where to!—O! I remember—to the "occult Plane"—viz., the back of the Himalaya Mountains; and evolve into Globular Mahatmas.\*

Yours respectfully,

LEO CASTLE.

May 19th, 1896.

\* I would here say that as we are prepared to discuss the subject of the Earth's shape apart from the statements of "The Bible," the editor of "Reynolds's Newspaper" has manifested crass ignorance both with regard to our position and our "capabilities for scientific demonstrations!!"—Ed.

In the same issue we read, "It is written: 'ye cannot serve God and Mammon,' but apparently this does not apply to"—the editor of the newspaper which professedly "advocates the widest possible measures of reform!" Surely there are more than one kind of "toadies" as he calls certain persons in "The World?"

We also notice the editorial article is headed—AWAY WITH THIEVES! and "Let us have done with cant." We add our hearty Amen; and we truly believe that "if there was a spark of manhood left in the people they would make it impossible for *any* "Scientist to appear in public on any occasion without giving an account of his share in the plunder of the public," by teaching, at the Nation's expense, the absurd falsehood that we live on the outside of a whirling sea-earth, Dutch-cheese-shaped Globe with "more than 10 different motions!" (*Invention*, 25th April, 1896., p. 266.) Could any "thesis" be more preposterously absurd? No wonder the editor of "Reynolds" says, "Asses! They . . . . are only laughing at your contemptible simplicity in trusting them!!!"

To this letter the following appeared:—

"Leo Castle.—We have more important matters to attend to than a barren discussion on the absurd thesis, 'Is the World Flat or Round?'"

## THE EFFECTS OF EVOLUTION EXPOSED.

BY

## "A FOOLISH THING OF THIS WORLD."

## PART II.

God's account in Genesis not only tells us of "special organic creation," it also informs us of "special inorganic creation," and instructs us that the organic creation were afterwards to propagate every one *after ITS KIND*. And the facts which prove this are as numerous as the creatures which have been born to life. For as every creature coming into being comes according to *its kind*, every creature by its existence is an evidence that species were originated by special and distinct creations. Facts thus numerous as the creatures that have lived and died, or that are now living, prove beyond all reasonable doubt the truth of special creation. In saying this I am confirmed by no less an authority than Professor Huxley, who says, "Our acceptance of the Darwinian hypothesis must be provisional so long as one link in the chain of evidence is wanting; and so long as all the animals and plants certainly produced by selective breeding from a common stock are fertile, and their progeny are fertile one with another, that link will be wanting." (*Evidences of Man's Place in Nature*, p. 107, 1864.) Again he writes, "After much consideration, and with assuredly no bias against Mr Darwin's views, it is our clear conviction that, as the evidence stands, it is not absolutely proven that a group of animals, having all the characters exhibited by species in nature, has ever been originated by selection, whether artificial or natural." (*Lay Sermons*, p. 295.) "It cannot escape the attention of anyone that Mr Darwin, Mr Wallace, Professor Huxley, and all the other advocates or defenders of Darwinism, do not pretend to prove anything more than that species MAY be originated by selection." (*What is Darwinism?* p. 74.)

Scientists who reject God's Word have no science regarding creation, but merely the vaguest speculations and ideas of their own manufacture. "If we receive the evidence of men, the evidence of God is greater," and therefore the more worthy of credence. If the Scriptural account of creation is to be accepted, Evolution in *every form* must be entirely rejected, for it *necessarily implies unbelief in the Scriptural account*, and he who thinks he can hold both shows he has thought very little of either, for the one *modus operandi* necessarily nullifies the other. If, therefore, Christians desire to be loyal to God

and His Word, they must reject Evolution in all its forms as a blind, unscientific, unphilosophical and God-dishonouring guess.

Here let me draw attention to what some other Professors have said on this subject. Professor Kölliker, in his critical essay upon "*The Darwinian Theory*," says, "No transitional forms between existing species are known; and known varieties, whether selected or spontaneous, never go so far as to establish *new* species, and no transitional forms of animals are met with among the organic remains of earlier epochs." Professor Huxley is reported in *Lux* (Nov. 8th, 1893,) to have said, "Until selective breeding is definitely proved to give rise to varieties infertile with one another, the logical foundation of the theory of natural selection is incomplete,"—*i.e.*, not proven!

"At first, protoplasm could have had no proclivities to one or other arrangements of parts; unless, indeed, a purely mechanical proclivity towards a spherical form when suspended in a liquid. At the outset it must have been passive. In respect of its passivity, primitive organic matter must have been like inorganic matter. No such thing as spontaneous variation could have occurred in it; for variation implies some habitual course of change from which it is a divergence, and is therefore excluded where there is no habitual course of change. In the absence of that cyclical series of metamorphoses which even the simplest living thing now shows us, as a result of its inherited constitution, there could be no *point d'appui* for natural selection."

## "HOW, THEN, DID ORGANIC EVOLUTION BEGIN?"

Herbert Spencer, *Nineteenth Century*, May, 1886.

Here let me draw your attention to the fact, that Evolution teaches that death is an *absolute necessity*! Professor Alfred Russell Wallace, F.R.G.S., etc., says, "Given the necessity of death and reproduction, and without them there could have been no progressive development of the organic world, and it is difficult to imagine a system by which a greater balance of happiness could have been secured." This quotation is, with approval, cited by Professor Drummond in his "*Lowell Lectures on The Ascent of Man*."

Here, then, it is tacitly acknowledged that death is the executioner to carry out the behest of "natural selection" or "progress." But for death, the "first forms of life" would have remained "forms" for ever. Only for death man could not have been evolved, for as he is *the beau ideal* of the "process" of "protoplasm," he of necessity must be the "survival of the fittest" to live. Therefore, the Evolutionist has no

right to complain of death, for it is the absolute essential of the "process" spoken of by Professor Stokes!

It is simply useless, or worse, to tell us that we must take comfort from the reflection that the terrible struggle for existence tends to final good, and that the suffering of the ancestor is paid for by the increased perfection of the "fittest."

Death, according to the Scriptures of Truth, is an *enemy*, and an enemy that is to be "destroyed." 1 Cor. xv. 26; Rev. xx. 14. Surely the acceptance of the hypothesis of Evolution must of necessity shake our confidence in the Scriptures. Yea, it would cause any *thinking man* who is not rooted, grounded, and established in "the faith once for all delivered unto the saints," to reject the Bible in toto.

### LETTERS TO THE EDITOR.

DEAR SIR,

In an article on "Scientific Falsehoods" in "Earth Review," October, 1893, you quote Mr W. Winckler, C.E., as saying:—"As an engineer of many years experience, I say that this absurd allowance (for curvature) is only permitted in school books. No engineer would dream of allowing anything of the kind. . . . College Astronomers have made the student engineer to think that in his method of levelling what is known as the 'backsight' cancels any curvature by his 'foresight,'" and so on. "It is only a theory. . . ."

As an uncompromising Zetetic may I ask you to kindly state the title, etc., of the work by Mr Winckler in which this quotation appears? For lack of this I have found the value and convincing force of quotations seriously diminished, and often disbelieved by opponents.

Yours, etc.,

JOHN BRADLEY.

To "A Hottentot."

DEAR SIR,

I am unable to say where I got the quotation from, but as Mr Winckler is a subscriber to your journal he will doubtless forward you the desired information as to where it can be found.

Yours truly,

A HOTTENTOT.

To Ed., *E.R.*

### THE SHAPE OF THE EARTH.

BY LIEUTENANT MIDDLETON, R.N.

A SERIES OF LETTERS WRITTEN IN 1871.

No. III.

SIR,—Globular scorn and apathetic indifference may perhaps have contorted themselves into confluent small-poxed dimples of derision, that such a *self-evident* matter as that of there being a perpendicular should have been matter of doubt, wonder and amazement, but, strange though it may appear, this subject of the perpendicular is one which the supporters of the Globe theory cannot admit! and one which, as a matter of two parallel perpendiculars, they must perforce deny, and I believe I am fully justified in stating, they have already denied! Of course I knew this when writing my last, and I did pause and reflect as to whether I should be so cruel as not to hint at the deceptive nature of the position; but being aware of the innate stolidity and sources of refuge of the Globular form in nature, I thought it advisable and perfectly fair to allow the blind mole-like nature of obstinate perversion of truth to quietly entrap itself by allowing the *fact* of the perpendicular; and doubtless during the week the fact has been pretty well realised by those most interested in denying that the earth is a plane; and that without the faintest suspicion on their part that they were really admitting which is perfectly fatal to their theory, and what has been denied by those, who, through thick and thin, are determined that during their lifetime the said Earth shall be such shape as shall best suit their pockets, and save them from the exposure of being but a very small remove from idiocy. Of course I allude to the professional supporters of the Globe theory—men whose attention has been thoroughly aroused to the fallacy of their doctrines during a term of thirty years, and who have persistently chosen to shut their eyes to truths which are evident to the capacity of a schoolboy. The *reality* that the earth is a plane is a most crucial test of the ability of these professors; not only so, but of ability itself; showing that *true* ability must be allied to honesty and truth, without which a *mere power of audacity* leads to most fatal mental blindness.

With regard to the perpendiculars, the Globe-ites are, perforce, obliged to insist that the "plumb-line is perpendicular," not only to the circumference, or any artificial surface, but "to the centre of the Earth," and consequently they must also insist that there can be no such thing as *two perpendiculars parallel to each other!* A carriage wheel offers a good illustration of the subject, the spokes representing the different perpendiculars to or from the centre, no two of which would be per-

pendiculars parallel to each other if prolonged through the circumference of the wheel. The principle of a thing is *that* by which it must stand or fall; for perpendiculars are not ELASTIC, but most RIGID—distressingly rigid as regards astronomers in this case. *Assuming* a circumference of the earth, its immense size would in no way alter the action of the principle: it would be impossible to have two perpendiculars opposite to each other; not only so, but every human being would be at an angle to every other human being, and a true perpendicular could not exist at all relatively to a man; for as both the man and the perpendicular would be vertical to the assumed centre of the earth, each would, perforce, represent a plumb-line prolonged from the centre outside the circumference, and would therefore be at an angle to the other. But now I have simply to shift the application of the perpendicular from the surface of the water to house building, and it will become apparent to any intelligent householder or lodger that on the Globe theory of curvature it is simply impossible to build a house! for a house is A MASS OF PARALLEL PERPENDICULARS!! But what shall we say of a terrace? of a street? of a city stretching over miles? of a number of cities stretching over hundreds of miles? Their perpendiculars ARE parallel to one another! nay, not only their perpendiculars, but those in Calcutta must be, perforce, parallel to those in London, though the height of their respective planes may differ. It is extraordinary that any man of sound sense can cast his eyes around one of the London squares (where the houses are symmetrically built), and remain for one moment in doubt as to the true shape of the earth: *the level tops of the houses tell their own tale truthfully.* To say that the houses are erected on a *level foundation* will not mend matters at all; for, firstly, as above stated, the plumb-line (allowing curvature) *must* fall towards the centre of the earth, and would, perforce, be at an *enormous* angle to the level foundation; enormous because *practice* demands a nave, and a nave limits the number of radii: further all errors *must be* working errors; but, secondly, if this line of defence is set up; then it is plain that the circumference of the earth is any shape man chooses to make it; level where he chooses to build, but curved elsewhere!\* (See note p. 81.)

Poor wobbling World! poor Universe, a cannon-ball with the top shaved off, nay, sliced on all sides! (evidently our friend was thinking of the "many sided plane figure" which he had to swallow to obtain his certificate of qualification!—Ed., *E.R.*)—WHAT WOULD BECOME OF THE TRAJECTORY? I am very much afraid that all the astronomers would fail in making such a chipped affair go straight through space, or correctly through any shaped orbit. Would a prize-shooting rifleman allow his bullets to be nicked about? And yet this earth must either

be flat, or a terribly nicked-about bullet. If anyone should imagine that the radiation from the earth's centre would not be sufficient to utterly distort the perpendiculars of the architect, let him erect a pole 80 feet high, throwing the *base* of such pole the smallest *practical* angle out of the vertical line, and then let him observe the increased error at the *summit* of his pole; he will find that the *least* practical deviation at the base makes an *immense* difference at the top—one *utterly impracticable* as far as house building is concerned! Talk of terrific shakings! Why, if each dweller in brick, stone, or other masonry, could be sufficiently excited to take a calm realisation that his house might possibly split in two from curvature—convulsing perpendiculars—he wouldn't shake, quiver, nor rattle with amazement! his unjoint—unjoint with trajectory—terror: initial toes, conoidal shanks, untwisted thighs, would make a deadly race with—with—ah!—the shelled remainder. Again, as I hinted in my last, the circle of curvature of the ocean will certainly NOT COINCIDE with the circle of curvature of the land! therefore, for a complete circle of curvature the astronomers will have to search Hades, and perhaps they will stay there, when they are about it. This matter of circles of curvature overlapping circles of curvature is a most deadly thrust in the astronomical armour. These funny measurers of earth are even now pretentiously about to inform mankind of the exact curvature; arcs of which I saw advertised as being measured here and there, everywhere, OVER THE LAND, of course. Ha, ha! shrieks, yells, convulsions: mankind, tie your ribs! belay your laughing organs! crank your shrieking windlass! or beware of sudden dissolution: OVER THE LAND, *of course*; in which case the *said* CIRCLE *will* NOT TOUCH THE OCEAN AT ALL!!!

\* This is the trick of deception played upon our sailors for they are taught that "in PLANE Sailing, the portion of the earth traversed is considered to be a PLANE SURFACE, the meridians being represented as parallel to each other, and the parallels of latitude as straight lines crossing them at right angles." "Navigation," by Rev. W. T. Read, M.A., Headmaster Thames Nautical Training College, page 19. On page 51, under the heading, Great Circle Sailing, we read "resource is had to *approximate great circle sailing.*" What is the "resource"? Why—well there, read it for yourself, and call it what you like—"the vessel may be said to sail upon the sides of a many sided *plane figure* (a polygon)." Yet our sailors are given a Mercator's Chart to practically sail their ships by! and the same book, page 32, laying down "the principles" of the chart, crams the sailor with the following—showing clearly that they are sailing their ships on a Flat, Level, Horizontal surface, when, we ask will these men honestly own the true shape of the World?—"the equator has now become a straight line." We pause here to ask if that is a *true* statement of natural phenomena? "the meridians have become straight lines at right angles to it, and parallel to each other." What! on a Globe? No, my friends, the dishonesty of the thing is exposed by itself; for they have just had to unroll the chart "into a Plane surface"!!! Then it continues, "And the parallels of latitude also straight lines everywhere equal to the equator." Certainly they can put everything straight and yet curved. Could "learning," so-called, go to greater lengths in deceiving people? Is not the *source*, aim and results of such "learning" apparent to every one who loves to *practice truth*?—Ed., *E.R.*

(To be continued.)

## ANSWERS TO CORRESPONDENTS.

All Letters to the Editor must be briefly and LEGIBLY written on one side of the paper only. They *must* be accompanied by the name and address of the writer, as a guarantee of good faith. Where replies are requested by post, the postage must be enclosed. All letters *must* be prepaid and addressed to

MR J. WILLIAMS,  
96 ARKWRIGHT STREET, NOTTINGHAM.

LADY BLOUNT AND OTHER FRIENDS.—Pray accept our hearty thanks for the loan of the "Flaming Sword," with which is incorporated "The Salvator and Scientist," for last May. We have not received any since April last, and consequently was absolutely ignorant that the editor of the latter had made any challenge to us! This is all the more strange seeing that we are under an agreement for the exchange of our periodicals!

We prefer not to express any opinion on the editorial replies made to your questions in the latter, but certainly we perceive therein—as we suppose you do—that he teaches some parts of the Globular *supposition*, suited doubtless to the Koreshan science—so-called.

In reply to your second question we are of opinion that Koresh has blinded him either with his anti-Christian religion or his pseudo science, or perhaps both. Our reason for this opinion will be seen in the following remarks:

He says, "In the past we have referred to the work of Parallax. . . . from some experiments which he conducted, he concluded that the surface of water is flat, and therefore that the general form of the earth is a comparatively flat surface—a circular plane. . . . His followers are called Zetetics. . . . some of them have deemed it wise to stop with his conclusions, and to stubbornly defend them against all progress and all demonstrations contrary to the opinions which they hold.

This is absolutely false, and as a reader of—if he *does* read it—"The Earth—not a Globe—Review," he *ought* to know it.

But, continues our critic, "It is really provoking to observe *facts contrary to erroneous theories* (observe the words I have italicized, please.—*Ed.*, *E.R.*) advocated in the world and then be unable to induce the advocates of the fallacies to even *consider* the facts observed!"

And now mark what follows: "And this is somewhat the basis of a charge of inconsistency that we have to bring against the editor of

the journal advocating the so-called Zetetic Philosophy. He does not like the character of our demonstrations, and promptly manifests the fact that he does not. . . ."

We take it for granted that every reasonable man reaches conclusions by the application of the principles of logic—reasoning from a known premise; a Zetetic, especially, should take extra precautions not to violate his reasoning faculties by jumping at conclusions. We ask for the *known premise* of conclusion that the Rectilineator does *not* demonstrate the earth's concavity, and consequently does not overthrow the idea of the earth's flatness. We promptly challenge the "Earth Review" to meet the issue."

And the "Earth Review" promptly and triumphantly replies in the power of logic, our "*Known premise* of conclusion that the Rectilineator does NOT demonstrate the earth's concavity," is found in the fact of our critic's *own* statement—viz., "We accept THE FACT that the surface of all water at rest is horizontal!" *Ergo*. Were all the water in the world of Seas, Rivers, etc., at rest, they would be horizontal, level, flat, consequently the world is proved to be a plane and therefore *not* concave.

No engineer ever allowed for concavity any more than he does for convexity, but always works to a datum horizontal line, which is both a flat and a level line.

And now we charge the editor of the "Salvator and Scientist" with gross inconsistency.

First, in that he admits that the surface of *all* water at rest to be horizontal, and yet contradicts that *fact* by teaching the earth to be concave. Logic in fits, no one thing can be concave at the rate of 8 inches to the mile, and at the *same time* be horizontal!

The Bedford Canal is about 20 miles long, and its water is at rest, therefore *horizontal*, level, flat, consequently *not* concave. Is it not logical to expect that if the earth was concave it should be seen there? But if the Koreshan Rectilineator was taken there it would *not* and could *not*, show the earth to be concave, for the fact admitted by our critic is, that "all water at rest is horizontal," therefore, that 20 miles of water, running in almost a straight line, proves the Rectilineator to be utterly useless to prove the surface shape of the earth. Thus do we answer his challenge for the grounds of our denial of the evidences embraced in the demonstrations of the Rectilineator and the whole scientific staff of the Koreshan Unity of which he is the head. And thus does the FACT of the horizontality of water's surface dash in pieces the halo of earth's concavity with which he and Koresh have



thought to crown themselves! Of course, when anyone asserts that they "accept the fact that the surface of all water at rest is horizontal, but defy us to show that water's surface is flat," we confess ourselves beaten for we cannot answer a question so glaringly absurd and contradictory, but nevertheless absolutely necessary for the holding together of their Eclectic Egg-Globe theory.

In our critic's language we reply, let the "Salvator and Scientist" again review the earth—and do something or keep quiet and non-combative!"

C. HARPUR.—Thanks for the pamphlet, "Remarks on the Immutability of the Earth, etc." We hope to quote from it some time in this journal. We simply smile at such slander as that in the "Labour Leader" by "Jim Connell." He can read about himself in the Bible. See Titus i. 12.

E. J. LOWTHROP.—We will try and answer the schoolmaster's questions to you on some future occasion. Hand him a copy of this issue.

MR MACKAY.—Let our traducers write to the Royal Observatory, Greenwich, or the Observatory, Cambridge, and ask their own authorities if it is "a lie that Jupiter was seen through the Moon when occulted by it;" also, if stars of the seventh magnitude have not been seen through the Moon. If they will send us the reply they receive we will print it in this journal.

#### IN MEMORIAM.

We regret to record the death of JAMES HEYWOOD, Esq., M.A., F.R.S., etc., on October 17th, 1897, at his residence 26 Kensington Palace Gardens, in his 88th year. Although the deceased gentleman was not a member of "The Universal Zetetic Society," yet owing to his generous and liberal-minded character, the Society had for years been greatly assisted in gaining information on the latest Theories in the Scientific (?) World, which would have been difficult to obtain otherwise, without an expenditure in excess of the means of the Society.

We also deeply regret the death of Mr HENRY GEORGE, who died at New York, October 29th, 1897, valiantly fighting to the last for "peace on earth, goodwill towards all men."

"Their works do follow them."

## THE ALTERED TRANSLATION OF Gen. ii., 5.

By B. W. Newton.

"It seems needful that attention should be directed to the translation of Genesis ii, 5, as given by the Revisers in their new English version. It is a translation which is not without its advocates, both in ancient and modern days. But it is a translation greatly to be deplored; or perhaps I ought rather to say—denounced. It is pregnant with evil; because it sets the statements of the first of Genesis in direct opposition to those of the second chapter. Such contrarities Neology delights in, because it knows that Scripture becomes by such means a doubted and suspected book. There is, however, no real authority for the altered translation. It is one that is unquestionably erroneous. . . . The translation of the revisers contradicts all that the first chapter of Genesis taught, and nullifies its most prominent declaration. . . ."

In the history of Christianity there have been few things more painful or (I might say) more terrifying to witness, than the facility with which belief in the truthfulness of the commencing chapters of Genesis has been abandoned by persons who still profess to revere the Scriptures, and to receive it as veritably the Word of God. Such abandonment there must be, if we consent to receive the dogmas of any present school of geological science. With those dogmas the statements of Scripture, as given either at Sinai or in Genesis, cannot be reconciled. A gulf that cannot be passed yawns betwixt the declarations of the Bible and the assertions of Geology. Elijah and the prophets of Baal were not separated by a more impassable barrier. Woe be to those who seek to unite things that God has sundered. . . . The accredited statements of Geology nullify Scripture. We cannot follow both; and if we abandon Scripture we abandon God. . . . Geology, like Astronomy, or any other such science, whilst it employs itself in the ascertainment of facts is innocent, and useful for the purposes of life; but the moment it quits this comparatively lowly path and is tempted, instead of collecting and registering facts, to substitute *conjectures and hypothesis* for facts, and endeavour to account for its facts by unproved theories, it abandons the sphere of inductive science, and becomes the slave and dupe of vain, empty, deceiving speculativeness. One has to seek among the sophists of Athens, or the Gnostics of Alexandria for parallels to the grandiloquent self-complacency displayed by those who have been. . . magnifying their discoveries of flint spear-heads, and arrow-heads, and bones of pre-Adamic men. . . Nor are they agreed as to their facts. One might smile (if the subject were not too solemn) to see how the statements of one week by one writer, are set aside the next week by another. Yet both alike are positive. Are we to humble and abase the banner of God's Truth in the presence of men like these?"

[Every Zetetic answers no, decidedly not. We regret that the writer of these excellent extracts believes that he lives on a "terraqueous globe." The globular theory of Sir Isaac Newton is as anti-scriptural as the Geology taught at the present moment. And not only so, but it is the foundation of it, as also of Evolution.—Ed. E. R.]

## POPULAR FALLACIES.

It is a common mistake to accept theoretical explanations of certain conditions as being satisfactory when such are directly opposed to Scripture, common sense, reason, and practical experience.

To suppose that when the hull of a ship is lost to vision it is behind the curvature of water, when such a condition can be explained by the natural law of perspective.

To suppose water can assume a spherical form, when its surface is known to be horizontal and level.

To suppose, no matter how great the magnitude of the earth, that men can exist at the "Antipodes," with heads hanging down to the sky.

To suppose that the earth can revolve at the rate of over one thousand miles per hour at the equator, and the effect of such motion not be apparent on the surface.

To suppose that because a certain belief is popular, it must necessarily be correct.

To suppose the sun to be "immovable," when the Bible and every day observation declares that luminary to be in motion.

To suppose that scientists are better qualified than the Creator to describe the creation and shape of the earth.

To suppose that Scripture is no authority on such a subject when there is satisfactory evidence in nature relative to the self-same thing.

To suppose there is no necessity for discussing the subject when the popular belief is leading many to doubt the accuracy of Bible testimony.

To believe that Scripture should not be associated with secular research when the Bible is allowed to be the only court of appeal, and the only arbiter in many other things.

To believe a certain branch of "science" to be correct which makes God a liar, without any proof being offered.

To suppose that the earth has a curvature of eight inches to the mile increasing as the square of the distance when all the railway stations in England are practically on the same level, with the exception of occasional and stated gradients, no allowance having been made for curvature in their construction.

## "The Fall of the Apple, or the Topsy Philosophy."

Old Isaac sat under his apple tree,  
Quaffing his good old wine.  
He eyed his decanter right merrily;  
And lauded the fruit of the vine.

"Ho! bring me another full bottle," he cried,  
"And carry the 'empties' away;  
"For wine aids reflection when fitly applied,  
"And I would be pensive to-day.

He drank and he studied, he studied and drank,  
Until he could study no more!  
Then into a slumber he quietly sank,  
And varied his thoughts with a snore;

But a breeze shook the tree under which he reclined,  
And, alas! broke the good man's repose,  
For an apple dislodged by the troublesome wind—  
Struck him full on the bridge of the nose,

Then up started Isaac, his face all aglow  
At the insult he thought he'd received,  
And quickly looked round for his impudent foe,  
But in vain, as may well be believed.

He searched in the garden, he searched in the house,  
He searched in the neighbouring lanes;  
And he swore if he found him he'd certainly douse  
The rogue in the pond for his pains.

But useless his search, he returned and sat down;  
Another full bottle was brought;  
But still on his face sat a terrible frown,  
As the key to the myst'ry he sought.

The wind blew more fierce, and the ripe apples fell  
In multitudes, thickly around;  
Till another one lodged on his organ of smell,  
Rebounded, and rolled on the ground.

"Eureka," he cried, I've discovered the cause,  
"And value the pain not a straw,  
"Since 'tis so, 'twill teach me in future to pause,  
"Ere hasty conclusions I draw."

He ponder'd long time, and he drank deep and oft,  
And looked most remarkably wise;  
As he peered on the ground, then gazed up aloft,  
With wisdom and wine in his eyes.

"What causes the apples to fall to the ground,  
"And why do they first strike my nose,  
"And why does the garden appear to turn round,  
"Can any the reasons disclose?"

Triumphant he paused, but as no one was by  
To answer his several questions,  
Why no one, of course, could affirm or deny  
The truth of his laboured suggestions.

"I've hit it," said he, as he brought down his hand,  
On his thigh with astonishing force ;  
"The mystery's solved, I the whole understand,  
" 'Tis plain as the daylight, of course.

"The earth's moving round—I can see it myself—  
" (It's motion is making me queer.)  
"Ho ! fetch me more wine from the lowermost shelf ;  
" Quick ! sirrah, and bring it me here.

"Yes, the earth's going round, I am certain of that  
" (I wish for a while 'twould be still)  
"Therefore, as it goes *round*, it cannot be *flat* ;  
"Therefore must be as round as a pill.

"And what causes the apples to fall on my nose  
" And from thence to the surface of earth,  
"Where, their motion suspended, they lay in repose,  
"To what do these forces give birth ?"

He thought on it deeply, he pondered it long,  
Ideas in his brain tried to enter,  
*One* entered at last. "Yes I cannot be wrong,  
"Attraction draws all to the (*s*) center.

"I'll write me a book, my scheme I'll evolve,  
"—A book to astonish the nation—  
"And with two learned words every question I'll solve  
"Attraction, and—ah !—*Gravitation*.

Round went the orchard as old Isaac mused ;  
Till giddy he fell to the ground,  
And there as he lay, with his senses confused,  
Our sage even felt it go round.

His faithful man-servant at last sought him out,  
And carried him quickly to bed.  
"Yes, 'tis certainly *rolling*, of that there's no doubt ;"  
Was all the philosopher said.

### "THE LITERARY MAIL."

A QUARTERLY PUBLICATION devoted to the contributions of its subscribers  
and to the furtherance of their literary interests generally.

(16 pages crown quarto with Cover.) Edited by ALFRED WATSON.

Subscription 1/6 per annum, post free, from the Publisher : GEORGE ETHERIDGE,  
Finedon, near Wellingborough.

Specimen Copy together with other matter of interest to those of a literary turn of mind  
will be sent by the Editor for three 1d. stamps. Address : ALFRED WATSON, Washington, R.S.O.,  
Co. Durham.

### THE HIGHER CRITICISM EXPLODED.

A most essential addition to any Scholars Library. We heartily commend it.

To be had from Hon. Secretary, post free, 1 1/2d.

For List of Zetetic Publications, see cover of last issue.

### A ZETETIC HYMN.

"Workman of God, O lose not heart,  
But learn what God is like ;  
And in the darkest battle-field  
Thou shalt know where to strike.  
Thrice blest is he to whom is given  
The instinct that can tell,  
That God is on the field when He  
Is most invisible.  
Blest too is he who can divine  
Where real right doth lie,  
And dares to take the side that seems  
Wrong to man's blindfold eye.  
God's glory is a wondrous thing,  
Most strange in all its ways ;  
And, of all things on earth, least like  
What men agree to praise.  
Muse on His justice, downcast soul,  
Muse, and take better heart ;  
Back with thine angel to the field  
And bravely do thy part.  
For right is right,\* since God is God ;  
And right † the day must win ;  
To doubt would be disloyalty,  
To falter would be sin."

"Hymns that have helped" 119. Collected by W. T. Stead. 51. "The Penny Poets."

\* Read Truth is Truth. † Read Truth.—Ed.

### "THE EARTH WAS WITHOUT FORM AND VOID."

"The Hebrew words in Genesis for 'form and void' are *tohu ve bohu*. Pagnius translates them, 'desert and emptiness'; the Samaritan and Latin valgate, 'empty and void'; the Septuagint, 'invisible and incomposed'; the Syriac, 'desert and uncultivated'; the Arabic, 'covered with abysses.' In these explanations there is very little difference, for they express *the first state* of the earth, without animals, vegetables, or any green herb; in a word, empty and void of *all things*." Notes and Queries, September, 1896.

Dr. Robert Young, LL.D., translates them, "A ruin, vacancy, emptiness." See Analytical Concordance.

F. B. Burton says, "No collection of modern words can convey an idea of the profundity of desolation and vacuity expressed by the Hebrew words *tohu* and *bohu*."

Evidently there is no thought whatever of the shape of the world, for "The Earth" is the *only* element involved, and that in its sub-merged condition, ere the Divine fiat said, "Let the dry land, lit. earth, appear."—Ed.

The following Pamphlets and Leaflets may be had from Mr John Williams, 32 Bankside, London, S.E.

Zetetic Astronomy, an Address to the Religious World,	6½d	"
100 Proofs the Earth is not a Globe, ... ..	3½d	"
The So-called "Mistakes of Moses," ... ..	7d	"
The Sun Standing Still, ... ..	2½d	"
Oranks, ... ..	1½d	"
The Popularity of Error: The Unpopularity of Truth,	1/1	"
An Enquiry: Is the Earth a Globe? ... ..	2½d	"
Do the Bible and Modern Science Agree? ... ..	2½d	"
Answers to Objections, ... ..	2½d	"
The Bible v. Neo-Science, ... ..	12 for 6d	"
The Higher Criticism Exploded, ... ..	1½d	"
Are we Living on a Whirling, Flying Ball of Land and Water? ... ..	1½d	"
Turkey and Russia, ... ..	1½d	"
The New Spectrum Top, with five other optical illusions, ... ..	6d	"

"The New Spectrum Top appears to us to threaten serious things to the existing theories of Colour vision."—*Pall Mall Gazette*, March 7th, 1895.

### An "Analytical" Concordance to the Bible.

By Dr. ROBERT YOUNG, LL.D.

Sixth and Cheap Edition, cloth, 24/-. A Large Handsome Volume, 1106 pages, Demy Quarto.

Other prices according to Binding and Contents, 28/-, 30/-, 32/-, 36/-, 40/-, 52/6.

As this well known Work of Reference has hitherto been out of reach of many Bible Students, the Publishers resolved to issue a New and Cheaper Edition, Revised throughout and Enlarged, the Printing, Paper, and Binding being equal to that of any of the previous five Editions, which were published at 36/- to 70/-, according to styles of Binding and Contents.

The above work has earned (by its completeness, accuracy, and serviceableness), the warm commendation of the most eminent Scholars and Divines of almost every Christian denomination in Great Britain and America. It contains a most valuable summary of chief results from recent Topographical and Archaeological research to the illustration of scripture.

If you do not possess a copy of this invaluable help to an intelligent study of Holy Writ, write at once to J. WILLIAMS, 32 Bankside, London, S.E., and get a copy by return of parcel post.

All the Biblical and Oriental Works by Dr. Robert Young, LL.D., can also be obtained from him.

N.B.—All supplied on LOWEST terms for **Cash with Order**.

### NOTES AND QUERIES.

A Monthly Magazine of History, Folk Lore, Legends, Science, Art, Literature; Masonry, Mysticism, Myths; Metaphysics, Psychics, Theosophy; Mathematics, and Recondite Matters. It contains a large number of Odds and Ends gathered from "Many a quaint and curious volume of forgotten lore." Vols. I.-XIV. (1882-1896), each fully indexed. "Many people know many things, no one everything." Circulates in all parts of the world. \$1.00 a year, in advance. Back Volumes and Numbers supplied. Vol. XIV. for 1896. Address S. C. & L. M. Gould, Manchester, N.H., U.S. America.

### FLAT FACTS V. SPHERICAL ASSUMPTIONS.

(Contributed.)

"We assume the convexity of the water because we know of no other way to explain the appearance and disappearance of ships at sea."—Prof. Huxley.

"In navigation the surface of the ocean is assumed to be spherical."—Robinson's New Navigation and Surveying, p. 326.

No one questions the above authority. If it were possible to prove convexity the above assumptions would not be found in school books. Convexity is not and cannot be proven. It is assumed.

Note carefully the following FACTS:—

"The spirit-level, which is usually on the under side of the surveyor's transit instrument, is used to determine a horizontal line. A horizontal line is at right angles to a vertical. It is a level line."—Robinson, p. 25.

"The verticle is perpendicular to the horizon."—Webster's Dictionary.

We want to show that in all instrument work, the line of vision is at right angles to the plumb-line; hence there are no acute or obtuse angles over which the surveyor looks when levelling. Note the following facts:—

"The intersection of the spider-lines must be in the optical axis of the telescope, so that the instrument when placed in the middle of a straight line will, by revolution of the telescope, cut its extremities. Revolve the telescope and find an object in the opposite direction which the cross will bisect; the two objects would be exactly in line."—Robinson, p. 26.

"To adjust a theodolite, measure very carefully the distance between two stations, and set the instrument half way between them. Now bring the level near to one of the stations, level it carefully and sight the rod. Note the number on the rod, say six feet, and have the rod-man go to the other station and place his target on the rod just six feet. When the telescope is turned upon it the horizontal spider-line ought to just coincide with the target, and will, if the instrument is level or in perfect adjustment."—Robinson, p. 33.

The line of vision between the two stations is a straight line because the horizontal axis of the instrument forms two right angles with the radius of the earth or with a plumb-line.

The above quotation says that if the instrument is level it will cut, the same altitude on the levelling-rod in opposite directions

It has been proven that the horizontal line is at a right angle to a vertical. It has been proven, also, that the line of vision is horizontal.

The following Pamphlets and Leaflets may be had from Mr John Williams, 32 Bankside, London, S.E.

## PAMPHLETS.

A Map of the World as a Plane (Coloured),	..	1	(post free).
100 Proofs the Earth is not a Globe,	... ..	3½d	..
The So-called "Mistakes of Moses,"	... ..	7d	..
The Sun Standing Still,	... ..	2½d	..
Cranks,	... ..	1½d	..
A Compendium of Practical Instruction,	... ..	1/7	..
The Popularity of Error: The Unpopularity of Truth,	... ..	1/1	..
An Enquiry: Is the Earth a Globe?	... ..	2½d	..
Do the Bible and Modern Science Agree?	... ..	2½d	..
Answers to Objections,	... ..	2½d	..
A Complete Set of Zetetic Literature,	... ..	6/6	..
The Bible v. Neo-Science,	... ..	12 for 6d	..
One of the Devil's Masterpieces,	... .. per 100,	1/	..
Proofs of the World's Rotundity Examined,	... .. per 100,	6d	..
The Puzzled Cleric,	... .. per 100,	1/	..
Zetetic Astronomy,	... ..	7d	..
Imaginary Astronomy,	... .. per 100,	1/	..
Pagan Astronomy,	... .. 6 for	2½d	..
Dauntless Astronomy,	... ..	2½d	..
The Higher Criticism Exploded,	... ..	1½d	..
Are we Living on a Whirling, Flying Ball of Laud and Water?	... ..	1½d	..
The New Spectrum Top, with five other optical illusions,	... ..	6d	..

"The New Spectrum Top appears to us to threaten serious things to the existing theories of Colour-vision."—*Pall Mall Gazette*, March 7th, 1895.

THE GREATEST EVENT OF THE AGE:  
THE DOWNFALL OF MODERN ASTRONOMY.

No objections received from Greenwich or Cambridge.

## FIFTY SCIENTIFIC FACTS

For Surrender to Nature's Fixed Truths,

By Mr E. BREACH, C.S., Author of "100 Proofs of Fixed Earth and Travelling Sun."

Price One Penny each; 9d per doz; 5s per 100.

## EVOLUTION—WHAT DOES IT MEAN?

One school in attempting to bridge o'er the chasm,  
Invented the germinal cell "Protoplasm,"  
Which was first inorganic, but afterwards seen  
To grow into "Sponges" and "Polyps" marine;  
From thence by "Absorption," "Accretion," and growth,  
Giving birth to the "Bivalves" or "Molluscs," or both.  
These creatures by striving grew fins, tails and claws,  
In spite of Dame Nature's implacable laws.  
They sprouted and turned into reptiles amphibious;  
Of obstacles placed in the way quite oblivious.  
Urged on by "Necessity" upwards they grew,  
Day by day giving birth to some quadruped new,  
Evolving - re-forming without intermission  
"As played upon by the surrounding condition."  
Then "Like produced *un* like" without hesitation,  
Earthy atom transformed into rich vegetation.  
Animalculæ left their aquatic abode,  
And into the Forests by thousands they strode.  
Frogs changed into birds at the voice of the Sirens,  
And everything living "changed with their environs."  
The Lichens from every restriction then broke.  
And evolved both the *Lepidodendron*\* and Oak.  
'Twas a wonderful time and a wonderful sight.  
To see how each day brought new objects to light.  
The stratified rock the strange story relates,  
How the "Invertebrata"\* begat Vertebrates;  
And the "Ichthyosaurus"\* one night in a freak,  
Gave birth to the "Mastodon"\*—(minus the beak),  
While the tidy Acidian evolved from the Oyster,  
Emerging somewhat like a monk from his cloister  
The Bear from the Mole in the past we descry.  
While the Bumble Bee came "by descent" from the Fly.  
Then the Lemur begat the grim Ape Catarrhine,  
From thence came the others "in process of time."  
Their tails being "chaffed" became shortened, 'till soon  
We arrive at the hairy-faced, tailless Baboon.  
These quarrelled and fought in the Forests primeval,  
Impelled by an inherent spirit of evil.  
The Pentadactyls ignoring all trammels,  
Produced the most curious Terrestrial Mammals;  
While the Porpoise and Sea-Horse plunged into the deep,  
Determined henceforward to water to keep.  
'By the use and disuse" of their parts, as it suited,  
They wandered (to no spot particular rooted),  
One half the world took with the other to strive,  
'Till naught but the "Fittest" were found to "Survive."  
At last Man appeared; but, amazingly strange!  
From that moment the animals never could change.  
"Like" at last "produced like," and the laws became fixed,  
Which explains why the Species since never got mixed.

J. W. H.

From "The Anti-Invide," March, 1887.

\* These are fossil animals and plants.

The following Pamphlets and Leaflets may be had from Mr John Williams, 32 Bankside, London, S.E.

### PAMPHLETS.

100 Proofs the Earth is not a Globe, ... ..	3½d (post free).
The So-called "Mi-takes of Moses," ... ..	7d "
The Sun Standing Still, ... ..	2½d "
Cranks, ... ..	1½d "
A Compendium of Practical Instruction, ... ..	1/7 "
The Popularity of Error: The Unpopularity of Truth,	1/1 "
An Enquiry: Is the Earth a Globe? ... ..	2½d "
Do the Bible and Modern Science Agree? ... ..	2½d "
Answers to Objections, ... ..	2½d "
A Complete Set of Zetetic Literature, ... ..	6/6 "
The Bible v. Neo-Science, ... ..	12 for 6d "
One of the Devil's Masterpieces, ... ..	per 100, 1/ "
Proofs of the World's Rotundity Examined, per 100,	6d "
The Puzzled Cleric, ... ..	per 100, 1/ "
Zetetic Astronomy, ... ..	7d "
Imaginary Astronomy, ... ..	per 100, 1/ "
Pagan Astronomy, .... ..	6 for 2½d "
Dauntless Astronomy, ... ..	2½d "
The Higher Criticism Exploded, ... ..	1½d "
Are we Living on a Whirling, Flying Ball of Land and Water? ... ..	1½d "
The New Spectrum Top, with five other optical illusions, ... ..	6d "

"The New Spectrum Top appears to us to threaten serious things to the existing theories of Colour-vision."—*Pall Mall Gazette*, March 7th, 1895.

### A SPECIAL OFFER.

A Copy of each of the following will be sent Post Free for 1/3.

The First Eight Copies of "THE EARTH Not a Globe—REVIEW."  
The Bible and Science: or, The Higher Criticism Exploded.  
Are we Living on a Whirling, Flying Ball of Land and Water?  
The Bible v Neo-Science. Cranks. The Puzzled Cleric.

### TRUTH WILL CONQUER.

[Dedicated to the Members of the Church Congress, held at Norwich, 1895.]

"Ah, man!  
You are so great—too great for this small world,  
For you have "proved" that Christ is all a lie!  
The Gospel that He taught us but a "MYTH,"  
The Bible but a pack of legends, old  
And false traditions—you can prove it. Ay,  
You are so wise. O vain, presumptuous man,  
You love to think the "Word of God" is false,  
And hope to mar its beauty with your sneers.  
Rail on; God's citadel shall never fall to you,  
Smite as you may  
Ah, "Science." SOURCE OF INFIDELITY,  
You blazon great discoveries to the world,  
Fresh wonders brought to light by such as you,  
Revealing Nature's "laws" (we call them God's),  
Proving all things exist by hidden sacred laws,  
And, adding pride to folly, call them "chance."  
Fool! God has made those laws, and set the sun  
And all the planets daily to perform  
Their wondrous course, thro' endless æons on,  
From cycle unto cycle, ne'er to cease  
Do ye not know that what has been *shall be*,  
That nought is new, nought underneath the sun,  
As said the King of Wisdom—Solomon?  
But ye, the more ye search, new wonders find,  
And newer wonders, till the less ye love  
The Wonder-Maker, All Creating God.  
Why is it thus? and why does Wisdom (?) turn  
Your heart from God, when He All Wisdom is?  
But ye will rave in your demented pride,  
Wise in the worldly wisdom of the world,  
Wise in your darling theories—so false  
To sense, or truth, or manly, honest doubt  
Ye know so much and yet one little child,  
In her sweet faith, is wiser than ye all  
And nearer unto God. And ye would force  
Your base *opinions* on the ears of men,  
And bid them hearken to your hollow words!  
Leading the blind with your phantasmal talk,  
Yourselves more blind than they, more dull your sense!  
False prophets, fools, to kick against the pricks  
As did the bigot Pharisees of old!  
But ye may rave; think ye that truth will fail?  
Think ye with puny breath to blast the Rock  
That has stood firm for nineteen hundred years  
Against the sceptic's scorn, the mocker's laugh,  
And borne the brunt of Infidelic sneer  
Immutable, in majesty supreme?  
Watching you beat yourselves to death upon it!  
We fear not: do your worst. *Right* conquers *Might*,  
And God's great *Truth* must conquer in the end!"

JOHN MERRIN.



The following Pamphlets and Leaflets may be had from Mr John Williams, 32 Bankside, London, S.E.

### PAMPHLETS.

100 Proofs the Earth is not a Globe, ... ..	3½d (post <sup>r</sup> free).
The So-called "Mistakes of Moses," ... ..	7d "
The Sun Standing Still, ... ..	2½d "
Cranks, ... ..	1½d "
A Compendium of Practical Instruction, ... ..	1/7 "
The Popularity of Error: The Unpopularity of Truth,	1/1 "
An Enquiry: Is the Earth a Globe? ... ..	2½d "
Do the Bible and Modern Science Agree? ... ..	2½d "
Answers to Objections, ... ..	2½d "
A Complete Set of Zetetic Literature, ... ..	6/6 "
The Bible v. Neo-Science, ... ..	12 for 6d "
One of the Devil's Masterpieces, ... ..	per 100, 1/ "
Proofs of the World's Rotundity Examined, per 100,	6d "
The Puzzled Cleric, ... ..	per 100, 1/ "
Zetetic Astronomy, ... ..	7d "
Imaginary Astronomy, ... ..	per 100, 1/ "
Pagan Astronomy, ... ..	6 for 2½d "
The Higher Criticism Exploded, ... ..	1½d "
Are we Living on a Whirling, Flying Ball of Land and Water? ... ..	1½d "
The New Spectrum Top, with five other optical illusions, .. ..	6d "

"The New Spectrum Top appears to us to threaten serious things to the existing theories of Colour-vision."—*Pall Mall Gazette*, March 7th, 1895.

### A SPECIAL OFFER.

A Copy of each of the following will be sent Post Free for 1/3.

The First Eight Copies of "THE EARTH -Not a Globe—REVIEW."  
The Bible and Science: or, The Higher Criticism Exploded.  
Are we Living on a Whirling, Flying Ball of Land and Water?  
The Bible v Neo-Science. Cranks. The Puzzled Cleric.

### THE PHILOSOPHER'S ATOM.

When ask we, "What is it? and whence did it come?"  
No answer is given; our science is dumb.  
Yet, bold in their dogma nor bolder than blind,  
Some crown it creator of matter and mind.  
These sages assure us the Atom's the cause  
And ruler supreme of all natural laws.  
The thinker may think that he thinks, but it's plain  
'Tis merely the atom exciting his brain  
Transmitting ideas through tissue and nerve,  
As if it were working some purpose to serve.  
Yet, facing us always, this marvel we've got—  
The *Thinker* is *conscious*, the *Atom* is *not*.  
The puppet examines itself and admires;  
The wire-puller knows not the trick of the wires.  
This paradox funny unquestioned must go,  
For science asserts it, and 'science *must* know."  
And therefore forsake we the Ruler whose eye  
The secretest action or purpose can spy,  
And worship the Atom, who cares not a jot  
What virtues we practice or wickedness plot.  
We may trample the Decalogue under our heel,  
We may murder, or libel, or covet or steal,  
Yet sleep with a conscience as calm and composed  
As though the most virtuous work we had closed.  
'T would be folly to feel any sorrow or shame,  
Since our dear little Atom bears ever the blame.  
'Tis the *Atom* that steals; 'tis the *Atom* that slays;  
'Tis the *Atom* that slanders, and dupes, and betrays;  
'Tis the *Atom*, in short, that must answer for all,  
While we, driven helpless, do nothing at all.  
Oh, wonderful doctrine! how soothing and sweet  
To the would be assassin, seducer, or cheat,  
Who conscience and scruples far flinging away,  
Determines the Atom alone to obey.  
But what about him who, though poor and distressed,  
'Mid troubles and trials is striving his best,  
In steadfast reliance on aid from above.  
Himself to forget and his neighbour to love?  
To *him* our philosophers surely might leave  
The one single comfort here he can receive;  
Through his darkness and gloom pierces one sunny ray,  
Is it human the heart that would take this away?

HUGH MACCOLL, in *Spectator*.

### A LITTLE SERMON.

If theologians will once bring themselves to look upon nature, or the materia universe as the embodiment of the Divine Thought, and the scientific study of nature as the endeavour to discover and apprehend that thought, they will see that it is their duty, instead of holding themselves altogether aloof from the pursuit of science, or stopping short in the search for scientific truth, wherever it points towards a result that seems in discordance with their preformed conceptions, to supply themselves honestly to the study of it, as a revelation of mind and will of the Deity, which is certainly not less authoritative than that which He has made to us through inspired men, and which is fitted to afford its true interpretation.

DR. WM. B. CARPENTER, in *Echo*, May 4, 1892.

The following Pamphlets and Leaflets may be had from Mr John Williams, 32 Bankside, London, S.E.

PAMPHLETS.

100 Proofs the Earth is not a Globe, ... ..	3½d (post free).
The So-called "Mistakes of Moses," ... ..	7d "
The Sun Standing Still, ... ..	2d "
Cranks, ... ..	1½d "
A Compendium of Practical Instruction, ... ..	1/7 "
The Popularity of Error: The Unpopularity of Truth,	1/ "
An Enquiry: Is the Earth a Globe? ... ..	2½d "
Do the Bible and Modern Science Agree? ... ..	2½d "
Answers to objections, ... ..	2½d "
A Complete Set of Zetetic Literature, ... ..	6/6 "
The First Eight Copies of the Earth Review, ... ..	1/2 "
The Bible v. Neo Science, ... ..	12 for 6d "
One of the Devil's Masterpieces, ... ..	per 100, 1/ "
Proofs of the World's Rotundity Examined, per 100,	6d "
The Puzzled Cleric, ... ..	per 100, 1/ "
Zetetic Astronomy, ... ..	7d "
Imaginary Astronomy, ... ..	per 100, 1/ "
Pagan Astronomy, ... ..	6 for 2½d "
The Higher Criticism Exploded, ... ..	1½d "
Are we Living on a Whirling, Flying Ball of Land and Water? ... ..	1d "
The New Spectrum Top, with five other optical illusions, ... ..	6d "

"The New Spectrum Top appears to us to threaten serious things to the existing theories of Colour-vision."—*Pall Mall Gazette*, March 7th, 1895.

"THE LITERARY MAIL."

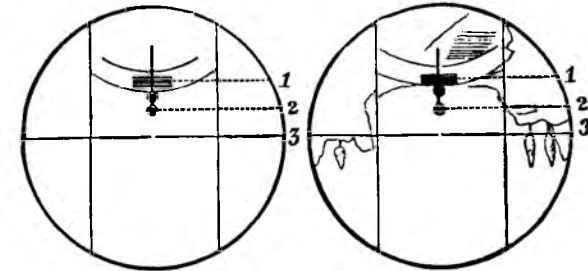
A QUARTERLY PUBLICATION devoted to the contributions of its subscribers and to the furtherance of their literary interests generally.

(16 pages crown quarto with Cover.) Edited by ALFRED WATSON.

Subscription, 1/6 per annum, post free, from the publisher: GEORGE ETHERIDGE, Finedon, near Wellingborough.

Specimen Copy, together with other matter of interest to those of a literary turn of mind, will be sent by the Editor for three 1d stamps. Address: ALFRED WATSON, Washington, R.S.O., Co. Durham.

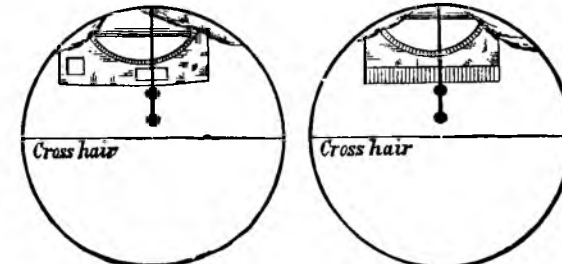
THE "SCIENTIFIC WAGER."



THESE figures are true copies of the sketches taken by Mr. Carpenter, on the 5th of March, 1870. They represent the signals (with the outlines of other objects), as they appeared in the telescope, from each end of the six miles of the Old Bedford Canal. The telescope was an *inverting* instrument: consequently, the objects appear up-side downwards. The first view is that of Old Bedford Bridge, taken from Welney; the second, is that of Welney Bridge, taken from the Old Bedford: the staff signal and cross-hair standing in the same relative position in each view.

The following argument is taken from the report as printed in the "*Field*," for March 26, 1870, and is considered to be *sufficient and unanswerable* :—

"The stations appeared, to all intents and purposes, equidistant in the field of view, and also in a regular series: first, the distant bridge; secondly, the central signal; and, thirdly, the horizontal cross-hair marking the point of observation; showing that the central disc 13ft. 4in. high does NOT depart from a straight line taken from end to end of the six miles in any way whatever, either laterally or vertically. For, if so, and (as in the case of the disc 9ft. 4in. high) if it were lower or nearer the water, it would appear, as that disc does, nearer to the distant bridge. If it were higher, it would appear in the opposite direction nearer the horizontal cross-hair which marks the point of observation. As the disc 4ft. lower appears near to the distant bridge, so a disc to be really 5ft. higher would have to appear still nearer to the horizontal cross-hair of the telescope. And therefore it is shown that a straight line from one point to the other passes through the central point in its course, and that a curved surface of water has NOT been demonstrated."



THESE figures are also taken from the "*Field*." They were printed as being what was seen by Dr. Coulcher, Mr. Wallace's referee, under precisely the same conditions as those in connection with the *other* sketches. And there they stand—their own witnesses—without a single word ever having been said in justification of them. We, again and again, denounce them as utterly false—as pictorial deceivers of the people—as illustrations of things *never seen, and not possible to be seen* under the circumstances. It is almost unnecessary to state that these diagrams appear, wrongfully, to show that Mr. Wallace, and *not* Mr. Hampden, was the winner of the "Scientific Wager." We reprint them because it is our duty, and for that reason alone: for if Dr. Coulcher is not heartily ashamed of them, we are. They will be found to be fully and fairly reckoned up—and such a reckoning up!—in a most ably-written pamphlet by Mr. James Naylor, of Leeds. And Mr. Hampden thinks that he has been trifled with!—taken in, just a little!—"swindled!" as he calls it:—*how ridiculously absurd!*

*N.B.—The following Pamphlets and Leaflets may be had by post from  
Mr. John Williams, 32, Bankside, London, S.E. :—*

## REVISED LIST.

	Post free.
	s. d.
<b>Zetetic Astronomy</b> , by "Parallax." ... ..	7
<b>A Compendium of Practical Instruction</b> , on the "Laws of Nature." ... ..	1 7
<b>The Popularity of Error, and Unpopularity of Truth</b> , with Map of the World as a Plane. ... ..	1 1
<b>Answers to Objections against the Planar System of Cosmography.</b> Illustrated. ... ..	0 2½
<b>An Enquiry</b> , is the Earth a Globe after all. ... ..	0 2½
<b>"Cranks."</b> ... ..	0 1½
<b>A Diagram</b> , proving that the only true base on which a Sextant can be used is an horizontal one ... ..	0 2½
<b>The Sun Standing Still,</b> ... ..	0 2
<b>The Midnight Sun.</b> Illustrated. ... ..	0 2
<b>The so-called "Mistakes of Moses."</b> ... ..	0 7
<b>100 Proofs the Earth is not a Globe.</b> ... ..	0 3½
<b>The First Eight Copies of the Earth— not a globe—Review.</b> ... ..	1 2
<b>A Complete Set of Zetetic Literature</b> , with Map of the World as a Plane ... ..	7 6
<b>The New Era at Hand</b> ... ..	0 3½
<b>All Past Time.</b> Biblical Chronology proved true ... ..	3 6
<b>Flat.</b> An Exposure of Theoretical Astronomy ... ..	0 6

## PAMPHLETS FOR DISTRIBUTION.

<b>The Bible v. Neo Science.</b> Per doz. 6d, per 100 ... ..	3 0
<b>One of the Devil's Masterpieces.</b> Illustrated. Per 100 ... ..	1 0
<b>School Proofs Examined.</b> No. 1. Illustrated. Per 100 ... ..	0 6
<b>Nuts for Newtonians to Crack.</b> Per 100 ... ..	0 6
<b>Imaginary Astronomy.</b> Per 100 ... ..	0 6
<b>The Shape of the World.</b> Illustrated. Per 100 ... ..	1 0
<b>Pagan Astronomy.</b> Per Dozen ... ..	0 3½
<b>Photo of Secretary,</b> 1s. Cabinet size ... ..	1 6